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Council p. 52

THE WILSON ORNITHOLOGICAL CLUB

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Lynds Jones.

THE WILSON BULLETIN

A QUARTERLY JOURNAL OF ORNITHOLOGY

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DOWN WITH THE HOUSE WREN BOXES

BY ALTHEA R. SHERMAN

If, when a felon is on trial for high crimes and misdemeanors he is confronted by numerous eye-witnesses, who are trustworthy and fully competent to testify, if by their evidence it is proved that for upward of twenty-five years he has been seen committing the most flagrant crimes against his neighbors; if the depositions of these expert witnesses have been spread upon the public records and printed in volumes accessible to every one, it would appear that the public ought to demand for the good of our country that the felon be sentenced, and that the sentence be executed without dangerous delay.

In the case of the people of North America versus the House Wren together with his subspecies the Western House Wren the eye-witnesses of his crimes are numerous, trustworthy, and exceedingly competent; among them are men, who rank with our most eminent ornithologists: men whose professional business during many years has been the careful study of birds. Besides these there are many other men and women less famous, but equally trustworthy as witnesses, who from the Atlantic seaboard to the Pacific coast and from the Gulf states to the farthest north range of the House Wren in Canada have made numerous statements regarding this species. Their observations cover a period of more than a quarter of a century and have been published in various ornithological books and magazines, which are open to the examination of all.

In this prosecution the public must be jury, judge and executioner and, most unfortunately, a large part of the public is unfitted to act in any of these capacities: as jurymen, because they have already formed an opinion; this opinion is not based on any real knowlege on the subject, either first-hand or otherwise, but having a wren-box on their narrow village lot they refuse to listen to the warnings of those who have seen the House Wren at his nefarious work. They are fond of *their* bird and are angry when the truth is spoken about it; they act precisely like the parents of vicious children, refusing to believe

the evil things their darlings do. They did not see the rattlesnake strike its fangs into the tender flesh of the little child that died last summer, yet the dying child was found and the rattlesnake near it: good enough circumstantial evidence for them was this, but the testimony of most trustworthy and competent witnesses of the evil done by the House Wren they flout and vilify. Neither are they fitted to act as judges. A judge in law must have knowledge of the literature of law, but with little or no knowledge of ornithological literature many people feel themselves supreme judges of this Wren; they will not take the bird magazines wherein they could find much convincing testimony.

It is a relief to turn from the ignorant and narrow-minded to those of more open minds: to those for whom the opinions and testimony of eminent scientists may have weight, and to remind them that among those who have borne most damaging testimony against the bad character of the House Wren may be found Messrs. Robert Ridgway, Otto Widmann, J. A. Munro, P. A. Taverner, Dr. Arthur A. Allen and Major Allan Brooks. For the presentation of this case to the open-minded a vast amount of data might be quoted: if desirable there can be given the names of the observers, together with the date and name of each magazine, also the page in it upon which the incriminating evidences against the House Wren have been published. In collecting these data a careful search has been made through five hundred and fifty-two copies of bird magazines in which several hundred people have had something to say about the House Wren and its subspecies the Western House Wren; for convenience at this time the name House Wren will include both the species and its subspecies.

Of all the magazines *Bird-Lore* has published the largest array of evidence relating to the criminal character of the House Wren. In its January-February, 1905, issue two veteran ornithologists spoke without shouting, yet most emphatically, regarding the danger from the House Wren, which attends the placing of bird houses. Any policeman will tell you that in a time of peril a gentle admonition will turn some people into a path of safety, but that on others he must use his club. It must be confessed that in connection with the danger here discussed, there is scarcely one of us who has not deserved the club. It is now a full score of years since Mr. Otto Widmann wrote the following gentle warning: "I would also say to those who put up bird houses of any kind to keep a watchful eye on the House Wren He is as great a nuisance as the English Sparrow. He enters homes in the absence of the owners, ruins their nests, pierces and throws out

eggs and can do enough mischief in one season to threaten the existence of a whole colony of martins. Nor are his attentions confined to bird houses either; open nests also suffer from his sneaking visits, and much of the damage laid at the English Sparrow's door may be traced to the innocent-looking Jennie Wren."

In the same number of *Bird-Lore* Mr. Robert Ridgway gave similar testimony. In speaking of his bird houses he said: "These nesting-places are occupied solely by House Wrens, for they will not allow any other bird to use them. Each spring a pair of Carolina Chickadees build their nest in one of them and have begun incubation by the time the House Wrens arrive, but that is as far as the poor Chickadees get, for the wrens immediately oust them and destroy their eggs." Again in the same magazine ten years later he writes: "The House Wren is equally tyrannical, and no small bird can nest in its vicinity. Several pairs of Carolina Chickadees and Tufted Titmice, and a pair of Bewick's Wrens, that had been with us all winter, and would have nested in boxes near the house but for the rascally House Wrens, who, though possessing boxes of their own, drove the other birds away." Farther on he speaks of this destructive little demon saying: "The first House Wren ever seen or heard by me in southeastern Illinois was noted in the vicinity of Olney some time near the year 1870. . . . Bewick's Wren was THE 'House Wren' of the entire region. . . . In the vicinity of Olney, the House Wren is now by far the more numerous of the two, especially in the town itself; and, wherever it has chosen a home, Bewick's Wren is forced out, for Troglodytes will not brook the presence of any species, Wren, Chickadee, Titmouse, or Nuthatch, which requires similar nesting-sites. Thryomanes on the other hand is exceedingly tolerant of other species, and therefore is far the more desirable, especially since it is equally tame and a far better songster. . . ."

A half decade passed and again Mr. Ridgway spoke, this time in the *Illinois Audubon Bulletin*, (1920). The deposition is similar to that given above, and this is the heart-breaking part of it: that spring after spring it is the same old story for a score of years, even for fifty years, except that the story grows worse as the years advance; this is true not only at Olney, Illinois, but wherever the placing of boxes has contributed to an undue increase in the numbers of this species. It is neither desirable nor practical to quote all the evidence that has been recorded. In a rapid trans-continental survey only a few records can be mentioned. In Litchfield, Connecticut, more than twenty-five years ago the House Wren was denounced as a despoiler: "not a robber but

a spoiler. He does not take other birds' eggs and eat them. He pierces them with his sharp little bill and throws them out of the nest. My direct knowledge of this fact comes from his treatment of the Chipping Sparrow. I have seen the wren throw the eggs of the latter out of the nest." From Saint Johnsbury, Vermont, came the message, "We have seen them drop the Bluebirds' eggs from the house door and take possession; which is more than the English Sparrow has done!" Similar offenses against the Bluebird were reported from Bristol, Connecticut; Hackettstown, New Jersey; Troy and Collins, New York, to mention only a few. In the magazines have been reported instances of his destruction of the eggs of the English Sparrow from Canton, Pennsylvania; of the Flicker and Robin from London, Ontario; of the Cardinal from Noblesville, Indiana, and from La Grange, Missouri; of the Texas Bewick's Wren from Wichita, Kansas; and of his usurpation of the boxes of Tree Swallow and Bluebird from Okanagan Landing, British Columbia.

Many people have seen him throwing from the nest the eggs of his own species. In fact, egg-throwing throughout the summer seems to be his main diversion. Egg-shells will answer if the whole eggs are wanting. An instance of this kind happened in my building erected to support a chimney for Chimney Swift occupants. Birds are excluded from its lower portion in which are stored various things, among them a Shrike's nest, containing the shells of eggs that had been blown. By accident a House Wren gained entrance to this room and was found there. Every shell of the Shrike's eggs had been carried from the nest and thrown to the floor. Some of the shells were not badly broken and all were returned to the nest. A few days later the wren again entered, again was found there, and again the egg-shells were scattered over the floor. The gentle Phoebe not infrequently is a victim of the wren's viciousness: her eggs are pierced and thrown out and her nests are torn down. One of her nests, not in use, built on top ef a porch post was completely destroyed by a House Wren. He carried off the material but made no use of it. In a similar manner has he been seen tearing to pieces the nest of an English Sparrow, also to enter one of these nests and steal the feathers of its lining.

Mr. Widmann laid stress on the destruction of open nests by this wren, and Mr. Ridgway has given an account of the great decrease of several small species of birds, such as the Baltimore Oriole, Yellow Warbler and Warbling Vireo in his neighborhood. He does not say that two minus two leaves nothing, but I have the hardihood to say that it does: that two birds minus their two eggs leaves nothing for annual

increase or replacement; that this loss repeated year after year soon brings a species to the verge of extinction. One has but to recall how soon the English Sparrow has nearly wiped out the Cliff Swallows and the Barn Swallows in places where formerly they were exceedingly numerous. He does not declare, as does Mr. Widmann, that much of this damage can be traced to the door of Jennie Wren, but I have the boldness to declare that I know it to be the truth. The state of things about Olney, Illinois, parallels so closely that of a deserted village, that something other than a coincident must be the explanation for it. This decadent hamlet twenty-five years ago, before the coming of the House Wrens, was a paradise for many birds; Baltimore Orioles and Warbling Vireos swung their nests in the trees, Chipping Sparrows built in the bushes, and the Maryland Yellowthroat nested in the dooryards. Gradually people moved away, taking with them their cats and their bad boys; for eight summers not a Blue Jay was seen; chicken yards having been abandoned the English Sparrow went off to the farms; no doubt, all would have continued well with the little birds if the House Wren had not arrived; he took possession of the boxes placed for Chickadees and Bluebirds as well as numerous holes in old buildings; he flourished mightily, and as his tribe increased the other little birds decreased as summer residents, until very few of them could be found. In solving a problem of this sort it is well to have a large workable acreage under observation and to study it intensively. No person can witness the despoliation of every nest by the House Wren, yet by the process of elimination taken together with a knowledge of his character the correct answer can be found.

That the gentle admonitions of Mr. Ridgway have influenced the editor of one Audubon publication is attested by his magazine, which has ceased to advocate the placing of wren-boxes; but most of us seem to have needed the club. Speaking for myself it must be confessed that I may have sinned against my small bird neighbors, when for purposes of study, there has been tolerance, years ago, of two nestings each of Screech Owls and Sparrow Hawks. But there is only one sin that causes constant mourning in sackcloth and ashes, that causes me to lie awake nights visioning the future condition of our country with its bird population consisting mainly of those undesirable aliens, the Starling and the English Sparrow, together with Screech Owls, Bronzed Grackles, and House Wrens: that sin was the putting up of bird houses and allowing them to be occupied by House Wrens. It may comfort some people to learn that for this sin full punishment is being meted out in this world: except the Traill's Flycatcher, whose

vigilance and pugnacity protects his nest, and the Goldfinch, whose nesting comes after the wren's frenzy has abated, can any other little birds hatch their eggs, since the House Wrens became numerous; the successful breeding here of small species is ended, they are becoming scarce as has been reported from Olney, Illinois.

The cheerful twitterings of the Wren are pleasing, but no more so than the songs of the Warbling Vireo, the Yellow Warbler, the Maryland Yellowthroat, and other small birds that he has robbed and routed. Some of these by second trials in more remote sports are still perpetuating their species, but in greatly diminishing numbers, wherever the House Wren has largely increased. For corroboration of this statement the regional lists of birds given in the ornithological magazines are cited. Some of the reports give the Chipping Sparrow as now rare where formerly it was abundant. To be sure the species has other enemies; in some places the Blue Jay as well as the Bronzed Grackle, the latter a bird, that, most unfortunately, is increasing in many places. Bad as it is it does not sneak through all the small bushes and into bird houses. As for injury done by the English Sparrow one would do better to choose twenty of these rather than one House Wren.

Again the ornithological magazines are the authority for the statement that the House Wren is extending its range. Reports of its recent appearance on Cape Cod and in the vicinity of Quebec have been given. In the WILSON BULLETIN for December, 1919, the late Dr. N. Hollister wrote of bird life about Delavan, Wisconsin, compared with what he had known there twenty to thirty years earlier. In speaking of former years he said, "House Wrens were reported by ornithologists as breeding now and then in other portions of the state and some few may have been present in my region, but as a summer resident the bird was certainly rare in the vicinity of Delavan. Now I found it, in July, one of the most conspicuous and generally distributed of town birds." With only one change, that of the town, this would read true of every place in the Upper Mississippi Valley it is confidently believed. When a nesting area becomes over-crowded with certain species, as for example the Flicker or the Brown Thrasher, they fight among themselves (each within the circle of its own species), and break up nests by destroying the eggs. This sort of race suicide may be continued for several seasons until over-crowding ceases and normal life once more holds sway. No such happy adjustment happens among the House Wrens. In this species it is the females that fight until one is killed, thus leaving an excess of males. Among a

dozen of the species it has been found that there are two to four males that can not find mates. Never has it been discovered that these were the more destructive of the two classes of males, it may be the other way about; that the evil spirit is stirred in them by the presence of the unmated males ready to take away their partners. Whatever is the true explanation it is a matter of belief that the destructive habit has increased disproportionately with the increase of the species.

The reason for this great increase must be clear to every one. It is the result of the campaign for erecting boxes for wrens; boxes with small openings that protected the wrens from their natural enemies and enabled them to breed in undue numbers. That the species needs no such protection, but survives in plentiful numbers in the remote portions of its breeding range is another fact proved by the regional lists printed in the bird magazines. How many persons have searched for such records? Those who have done so, have read of the House Wren having been found breeding "abundantly" in the wild portions of Pennsylvania and of West Virginia, in the mountains of Virginia, in the northern woods of Michigan and Wisconsin, in South Dakota, Saskatchewan, Alberta, British Columbia, Washington, Montana, Colorado, and in the higher altitudes of New Mexico and Arizona. Certainly enough instances to prove that this bird needs no special protection.

This protection has been given by some unwittingly, by others obstinately, those who refused to believe the emphatic warnings of Robert Ridgway and Otto Widmann spoken twenty years ago. An example of one open-minded searcher for truth was afforded by a conscientious and learned ornithologist, who could not quite accept the words of Mr. Widmann, hence set the men of his state to seeking proof. How long they sought was not stated, but it was considerably less than seven years. It calls up the picture of a woman bent on vindicating her wren, who takes her tatting, sits in the shade of her apple tree in sight of her wren-box, and while she tats an entire afternoon she sees no eggs destroyed, consequently declares that there is nothing but malicious lies in the whole story. Such zeal on the part of one investigator might provoke a smile if the subject were not so serious; but those of us who for twenty to fifty years have studied thoroughly and carefully the life of the House Wren know the difficulty of catching him red-handed. More often than otherwise the detection comes accidentally. Fingerprints are deemed trustworthy evidence against the human criminal. One "fingerprint" of this wren is the dropping of the egg, its contents uneaten, outside the nest; but this evidence is

lacking at times. It may be said, in brief, that the collecting of evidence is not rapid work; it takes years, yes, *years*. A man who begins this work today, possibly, may know as much a score of years hence as does the man who began twenty years ago, but no more. However, it is very doubtful if he will know as much, since he begins in a world crowded with House Wrens, whereas the other man had a nearly wrenless background. And will the word of the beginner of today be any more reliable than the words of the eminent men who have spoken erstwhile?

The word of a truthful, competent, observant man can be trusted *seemingly* about most things, but not about the destruction done by the House Wren. He may tell of a dozen or more things seen in this wren's life that very few besides himself have ever witnessed, and all his statement will be accepted if he does not mention the menace of the wren to other bird life; on this subject he can not be trusted. It is not because the menace is a new idea to them nor because its workings have not been seen by them that they are obstinate, for they readily accept new truths about things that they have not seen, such as statements about vitamins, endocrine imbalance, sex-linked inheritance, chromosomes, the atomic world, and relativity.

Were a criminal belonging to the human race on trial, had his trial dragged along for many years during which he had time and again been confronted by the testimony of witnesses who were expert, competent, and veracious, it is certain that public sentiment would demand that a verdict be given and a sentence be passed. In the case of the felonious House Wren have not numerous jurymen pronounced him guilty? Capital punishment has not been demanded, though if no steps are taken to stop his unrestricted breeding it is safe to predict that the time will come when all true bird lovers will wring his neck as cheerfully as they now wring the neck of the pestiferous English Sparrow. By no means is it asked that the death penalty be exacted; instead of that drastic measure a mild sentence is urged—merely that the wren-boxes be taken down, thereby returning this wren to the place in nature that he occupied before man's interference destroyed the natural balance. In order that this restoration be not short-lived it is hoped there may come a true appreciation of his disposition, so that no one will suffer a breeding House Wren on his premises any sooner than he would tolerate vermin on his person.

Bird-Lore has a splendid motto: "A bird in the bush is worth two in the hand." But if we are to have that bird in the bush in future years, and if it is to be any other than a House Wren, then we need

the slogan, "Down with the House Wren Boxes." The stand we take on this question will affect more than present interests, and each one should so act that a kind Providence need not protect his memory from the just execrations of future generations.

NATIONAL, VIA MCGREGOR, IOWA.

OWL NOTES FROM OHIO

BY CHAS. R. WALLACE

Nesting records of the Long-eared Owl in Ohio seem to be scarce enough to justify reporting our observations on this species in Tuscarawas County, Ohio. About eight miles south of Uhrichsville the Stillwater and Laurel valleys join, and between these valleys, for several miles, a rather flat topped ridge, from 150 to 250 feet high. forms the divide. This ridge has numerous sharp spurs and the slopes are rather steep and rocky and mostly covered with brushy timber. The drainage has cut many deep ravines and rocky gulches, where brooks flow down to the valleys, making ideal environments for the Louisiana Water Thrush, the Kentucky Warbler, and the Blue-winged Warbler. On June 13, 1921, a pair of Worm-eating Warblers (*Helmitheros vermivorus*), was noted in one of the ravines. The thick bushy woods and rocky gulches make good nesting associations for the Owl family and the Turkey Vultures. May 6, 1921, on a visit to two nests of the latter, we discovered the Long-eared Owls. When near the bottom of a wide ravine, one side covered with a rather open growth of timber, we saw an owl sitting on a fallen tree that had lodged several feet from the ground. A glance through the binocular proved it to be a young one. Cautiously stalking it we were able to get within a few feet without being discovered. Its immaturity showed that it could fly but little, so we stepped out in front. The transformation from a sleepy owlet to a scrapper on the defensive, was sudden and complete. With feathers fluffed and mandibles snapping he bid defiance to all intrduers.

But no sooner had it assumed the beligerant attitude than a feathery ball struck the ground near our feet and started down the slope with a broken wing. A moment later another one dropped near and the same performance repeated. Their distressing cries were much like the Cooper Hawks, when their nest is disturbed, but with a much accelerated tempo. This was something new in our experience with owls.

Finding their ruse did not work, they soon returned and flew back and forth in the trees above, while we were posing the owlet for a picture. The next move was to discover the youngster's home. Walking a short distance from the owlet one of the parent birds flew to a nest, about 20 feet up in a beech tree. From all appearances it seemed to be an old crow's nest, and contained three more owlets, and as usual with most species of owls, in different stages of development. As we climbed to the nest the parent birds tried the broken wing stunt again. And in grace of movement I must say they are not comparable to the Killdeer. We visited the nest again June 13, but they had all left the vicinity. We visited the nest May 5, 1922, and found the mother bird brooding three young and one egg. Judging by the development of the young they had been somewhat later in nesting than the previous year. By climbing a neighboring tree fifty feet from the nest, we succeeded in getting a snap-shot of the mother bird before she left the nest, and from the nest tree the nestlings and egg.

Another visit to the nest April 29, 1923, found the nest deserted, and no sign of owls in the vicinity. A large number of pellets found under the nest tree in 1921 showed that most of their food had been field mice (*Microtus pennsylvanicus*), and a few skulls of the Shrew and Deermouse were found.

Our apology for reporting a nest of Old Bubo from this section of Ohio was its unusual position and the dinner menu. On April 29, 1923, about a half mile from the Long-eared Owl's nest, in a rocky gulch, we discovered two well-developed young owls sitting on a ledge, or rather a water pocket. When about fifty feet from them, they flew across the gulch, about one hundred feet, to another rock. Our first impression was that they had come from a nest in some nearby tree. But the evidence showed from a close inspection at the base of the rock, that this was their home. The pocket was about twelve feet up, and with some difficulty we succeeded in climbing up to it. A few leaves and lichens on the bottom of the pocket were the only apology for a nest. They evidently had breakfasted, and part of the menu was left over for dinner—a decapitated American Bittern, and half of a full grown rabbit. The head and part of the neck of the Bittern had been eaten but the body was intact, and it probably had been carried from the valley a half mile below. Old Bubo must have strong wing-power to navigate the air with such heavy ballast. A number of pellets were examined at this nest and in the major part were made up of rabbit bones and fur. And we find the rabbit pellets at all the nest-

and day-trees in Tuscarawas County. They also prey to a considerable extent on the young skunks in the latter part of June and July.

Ninety-eight percent of the nests we have found in this county have been in hollow trees, and ninety-eight percent of nests in Delaware County have been in old Crow and hawk nests.

DELAWARE, OHIO.

BIRD BANDING AT THE IOWA LAKESIDE LABORATORY DURING THE SUMMERS OF 1923 AND 1924

BY DAYTON STONER

The present paper is here presented with two principal objects in view: first, to announce the establishment of a summer bird banding and trapping station at The Iowa Lakeside Laboratory on West Lake Okoboji in northwestern Iowa, and, second, to indicate in brief tabular form a summary of the bird banding activities which my wife and I have carried on at this place between June 19 and July 15, 1923, and June 16 and July 15, 1924.

Since the region offers an abundance of food and other fairly equable breeding conditions for both water anl dand birds a goodly number of summer residents provides material for the bander. Therefore, it was felt that the natural advantages would warrant the expenditure of some time and effort in bird banding and other kindred work not only on the five-acre plot comprising the grounds of the Iowa Lakeside Laboratory but at other suitable places in the contiguous territory.

For the most part only adult and well fledged young have been banded. However, from the results obtained or rather the lack of results obtained, I feel fairly well convinced that the banding of nestling birds is not a highly profitable part of the work. The mortality among them is high and the likelihood of their destruction by an agency outside the ordinary scope of human affairs reduces the chances for recovery to a minimum. This is particularly true of the smaller land birds. A large number of records which can not but which undoubtedly should be "closed" will, in time, greatly hamper the future work. Elimination of this feature is highly desirable. Adult birds are much more likely to survive and to furnish the information that is sought.

The appended table gives in summarized form the results of our banding activities during the approximately eight weeks under con-

sideration. A total of 651 birds representing twenty-five species has been banded. More than sixty per cent of the total number was banded in 1924. Nineteen species were represented each year; thirteen of these were represented in both seasons. In 1923 but twenty adult birds were banded; the remaining 222 were immature. In 1924 ninety-three of the 409 individuals banded were adult birds, the proportion of adults banded increasing from a little more than eight per cent of the total to almost twenty-three per cent of the total. Of the 651 birds

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TABLE SHOWING BIRDS BANDED

	1923	1924
Red-breasted Merganser—*Mergus serrator*	1 ad.	.....
Mourning Dove—*Zenaidura macroura carolinensis*	10 juvs.	4 juvs.
Belted Kingfisher—*Ceryle alcyon*	1 im.	8 juvs.
Downy Woodpecker—*Dryobates pubescens medianus*	.....	6 juvs.
Red-headed Woodpecker — *Melanerpes erythrocephalus*	4 juvs.	.....
Northern Flicker—*Colaptes auratus luteus*	11 juvs.	.....
Arkansas Kingbird—*Tyrannus verticalis*	3 juvs.	3 juvs.
Kingbird—*Tyrannus tyrannus*	17 juvs.	29 juvs.
Phoebe—*Sayornis phoebe*	4 juvs.	.....
Blue Jay—*Cyanocitta c. cristata*	1 im.	2 juvs.
		2 ads.
Red-winged Blackbird—*Agelaius p. phoeniceus*	6 juvs.	7 juvs.
Cowbird—*Molothrus a. ater*	.....	1 juv.
Rusty Blackbird—*Euphagus carolinus*	1 im.	.....
Branzed Grackle—*Quiscalus q. aeneus*	1 juv.	.....
Rose-breasted Grosbeak—*Zamelodia ludoviciana*	.....	3 juvs.
Bank Swallow—*Riparia riparia*	57 juvs.	116 juvs.
	19 ads.	91 ads.
Tree Swallow—*Iridoprocne bicolor*	.....	3 juvs.
		1 ad.
Barn Swallow—*Hirundo erythrogaster*	.....	1 juv.
Yellow Warbler—*Dendroica a. aestiva*	17 juvs.	15 juvs.
Maryland Yellow-throat—*Geothlypis t. trichas*	.....	1 juv.
Brown Thrasher—*Toxostoma rufum*	18 juvs.	42 juvs.
Catbird—*Dumetella carolinensis*	22 juvs.	44 juvs.
House Wren—*Troglodytes a. aedon*	43 juvs.	16 juvs.
		1 ad.
Robin—*Planesticus m. migratorius*	10 juvs.	5 juvs.
Bluebird—*Sialia s. sialis*	5 juvs.	2 juvs.
Total	242	409

banded, 283 or something over forty per cent were bank swallows while of these, 110 or more than thirty-eight per cent, were adult birds.

It was somewhat of a surprise to find, here in the midst of fairly natural surroundings and an abundant food supply, that certain species could be secured by using the government sparrow trap. And I have no doubt that if other kinds of traps were operated similar success would attend them.

Rather than indulge in promiscuous branding and trapping I believe that it is a good plan to have in mind some definite objective or objectives in connection with that work and I have endeavored to put this scheme into practice in my own efforts. Special attempt has been made to band and otherwise investigate the bank swallow (*Riparia riparia* (Linn.)). Studies are now under way on burrow excavation, breeding habits, home life, and other features of this well-known but little-studied species. Although some progress has been made and some data have been accumulated, work must be carried on here for several seasons in order to warrant an appreciable number of conclusions and worth-while generalizations.

The State University of Iowa, Iowa City, Iowa.

The Country Home of Mr. and Mrs. E. A. Lindsey, at "Ridgetop," where the guests at Nashville were entertained during the field trip on Sunday.

THE BIRDS OF SIOUX FALLS, SOUTH DAKOTA, AND VICINITY

BY ADRIAN LARSON

The region covered by this list includes the city of Sioux Falls and the surrounding country for a radius of about five miles, with the exception of west and northwest, in which directions the area treated extends about twenty miles.

The general surface of this region is an undulating plane, becoming more rough and broken near the lakes and streams. South and west and northwest from the city are to be found the innumerable prairie lakes and marshes or sloughs. Many of the latter have been ditched and tiled within recent years.

The larger of these lakes are Wall Lake, Grass Lake, Beaver Lake, and Lost Lake. Only one of these is worthy of the name, Wall Lake covering about seven hundred acres; all the others are merely large sloughs. These sloughs and lakes are usually margined wih rtushes, cat-tails, wild rice, etc. Some of the sloughs are nearly all overgrown with rushes.

Flowing from the north and winding around the city, then flowing north-easterly and finally south again is the Big Sioux River; another smaller stream, Skunk Creek, flows into the Big Sioux a short distance west of the city. There are also a number of small creeks that are scattered in the hills along the course of the Big Sioux and Skunk Creek and a few more are to be found on the prairie, but the latter generally dry up in the summer.

On the banks of these streams and sometimes extending into the hills and ravines as well as around some of the larger lakes is to be found a growth of deciduous timber, in some places forming extensive groves. Besides this natural timber there are groves scattered here and there on the prairie, planted as far back as fifty years ago by the homesteaders who were beginning the settlement of this country. Prior to that time the prairie was treeless.

As this region is situated near the eastern border of the Great Plains it is natural that many eastern species of birds are here found close to the western limit, while at the same time many western species are found close to their eastern limit, for instance the Wood Thrush and the Lark Bunting, respectively.

This region lies in the Upper Sonoran Life Zone, with Transition Zone elements and ecologically can be divided into three distinct faunal areas.

The first of these regions includes the lakes and marshes and streams and is represented by such mammals as the Muskrat and Mink; by such birds as the Pied-billed Grebe, Black Tern, Bittern, Wilson Snipe, and Yellow-headed Blackbird. Here grow the wild rice, cattails, arrow-head, wild celery, and various other aquatic plants. The second includes the prairie, fields, and pastures. Among the characteristic mammals are the jack-rabbit, ground squirrels, gophers, and various mice and shrews; some of the common plants are the goldenrod, pasque flower, wild rose, and various grasses, etc. Birds are represented by the Killdeer, Pinnated Grouse, Marsh Hawk, Short-eared Owl, Meadowlark, Bobolink, Prairie Horned Lark, Dickcissel, and Cowbird. The third region includes the native timber as well as the groves that have been planted by man. The common trees are the Cottonwood, Burr-Oak, Box-Elder, Green Ash, Soft Maple, Choke Cherry, Red Haw, Elm, and rarely a Red Cedar; among the shrubs are Wild Currant, Wild Gooseberry, Buck-brush, Lead Plant, Wild Plum thickets, and various willows. Various evergreens, the Mountain Ash, Hard Maple, Birch, Larch, and Mulberry have been introduced. The Long-eared Owl, Downy Woodpecker, Kingbird, Yellow-billed Cuckoo, Yellow Warbler, and the Wood Thrush may be considered as the typical birds of this region.

The following list of birds is based upon more than ten years of field study in the region treated. Great care has been used to exclude all questionable records. In a few doubtful cases specimens were submitted to the United States Biological Survey for identification of subspecies; but as the writer was a poor collector of birdskins this list may not be complete or up-to-date in the matter of subspecies. My work in the Sioux Falls region was concluded in August, 1916.

[The following list contains 237 named forms.—Ed.]

Western Grebe—*Aechmophorus occidentalis.* Rare transient; I have seen one in a local collection.

Holboell's Grebe—*Colymbus holboelli.* Rare transient: occasionally seen on the large sloughs.

Horned Grebe—*Colymbus auritus.* Transient; earliest date of spring arrival, March 27, 1910; fall dates, October 4 to 16, 1908.

Eared Grebe—*Colymbus nigricollis californicus.* Common on the sloughs during migration; occasionally seen on the river. Average date of spring arrival, May 3 (two years); earliest date of spring arrival, May 2, 1910; average date of fall departure, October 11 (two years).

Pied-billed Grebe—*Podilymbus podiceps.* Common summer resident of the marshes; breeds. Average date of spring arrival, April 20 (four years); earliest date of spring arrival, April 4, 1909; average date of fall departure, October 19 (four years); latest date of fall departure, November 1, 1908.

Loon—*Gavia immer.* Rare transient; during migrations may be seen on the lakes. Earliest date of fall arrival, October 18, 1908; latest date of fall departure, October 24, 1915.

Herring Gull—*Larus argentatus.* Rare transient. I identified one in the flesh April 6, 1911. It was later mounted by John Green, a local taxidermist.

Ring-billed Gull—*Larus delawarensis.* Fairly common transient; average date of spring arrival, March 19 (two years); latest date of fall departure, October 10, 1909.

Franklin's Gull—*Larus franklini.* Common transient; may breed on some of the large sloughs. I have watched flocks of migrating Gulls in October passing in a steady flight lasting all day. Average date of spring arrival, April 26 (six years): earliest date of spring arrival, April 16, 1916; average date of fall departure, October 22 (six years); latest date of fall departure, November 24, 1909.

Forster's Tern—*Sterna forsteri.* Transient; occasionally seen along the river within the city limits. May 14, 1916; September 12, 1915.

Least Tern—*Sterna antillarum.* Rare visitant; seen only along the river. Three dates, May 24, 1908; June 14, 1908; August 20, 1911. There were two together on the last date. Their small size and other points made identification easy.

Black Tern—*Hydrochelidon nigra surinamensis.* Common summer resident of the marshes; breeds. Average date of spring arrival, May 15 (eight years); earliest date of spring arrival, May 11, 1907; average date of fall departure, September 10 (six years); latest date of fall departure, October 4, 1908.

Double-crested Cormorant—*Phalacrocorax auritus auritus.* Rare transient. Earliest date of fall arrival, September 25, 1910; average date of fall departure, October 16 (two years).

White Pelican—*Pelicanus erythrorhynchos.* Transient. Often seen during migrations sailing and circling about in the air after the manner of Sandhill Cranes. Earliest date of spring arrival, April 4, 1909; latest date of spring departure, May 15, 1907; earliest date of fall

arrival, September 10, 1911; latest date of fall departure, October 23, 1910.

American Merganser—*Mergus americanus.* Rare transient. Earliest date of pring arrival, March 12, 1911; latest date of fall departure, November 14, 1915.

Red-breasted Merganser—*Mergus serrator.* Rare transient; I have seen one in a local collection.

Hooded Merganser—*Lophodytes cucullatus.* Common transient; a few remain in summer, perhaps may breed. Earliest date of spring arrival, April 12, 1908; average date of fall departure, November 14 (six years); latest date of fall departure, November 28, 1909.

Mallard—*Anas platyrhynchos.* The commonest of the larger ducks. Breeds; in the fall will sometimes linger till nearly the first of the year, often resorting to the corn and stubble-fields. Average date of spring arrival, March 15 (six years); earliest date of spring arrival, March 5, 1910; average date of fall departure, November 30 (seven years); latest date of fall departure, December 26, 1910.

Black Duck—*Anas rubripes.* I have seen one in a local collection.

Gadwall—*Chaulelasmus streperus.* Common transient; this duck is often mistaken for the Mallard. Average date of spring arrival, March 25 (five years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 9 (five years); latest date of fall departure, November 14, 1915.

Baldpate, or Widgeon—*Mareca americana.* Common transient. Average date of spring arrival, April 1 (five years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 12 (six years); latest date of fall departure, November 20, 1910.

Green-winged Teal—*Nettion carolinense.* Common transient; a few remain to nest. Average date of spring arrival, March 19 (six years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 13 (seven years); latest date of fall departure, November 15, 1914.

Blue-winged Teal—*Querquedula discors.* Our commonest duck; breeds; nesting about the sloughs concealing the nest in the high grass; nest with eggs, earliest date, June 7, 1908. Average date of spring arrival, April 8 (five years); earliest date of spring arrival, April 4, 1909; average date of fall departure, November 4 (eight years); latest date of fall departure, November 25, 1905.

Cinnamon Teal—*Querquedula cyanoptera.* I shot one October 8, 1911.

Spoonbill or Shoveller—*Spatula clypeata.* A common summer resident; breeds. Average date of spring arrival, March 23 (five years); earliest date of spring arrival, March 8, 1911; average date of fall departure, November 9 (six years); latest date of fall departure, November 28, 1915.

Pintail—*Dafila acuta americana.* Very common transient; a few remain to breed. This is one of the first birds to arrive in the spring. Average date of spring arrival, March 8 (five years); earliest date of spring arrival, March 4, 1909; average date of fall departure, November 13 (six years); latest date of fall departure, November 28, 1915.

Wood Duck—*Aix sponsa.* Rare. I have seen this Duck only twice, May 31, 1908 and October 8, 1911.

Redhead—*Marila americana.* Common transient; often erroneously called Canvas-back. Average date of spring arrival, March 25 (three years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 8 (six years); latest date of fall departure, November 28, 1915.

Canvas-back—*Marila valisineria.* Transient; not as common as the Redhead. Average date of spring arrival, March 24 (two years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 11 (four years); latest date of fall departure, November 14, 1915.

Scaup Duck, or Bluebill—*Marila marila.* Transient. Average date of spring arrival, March 30 (four years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 5 (six years); latest date of fall departure, November 28, 1915.

Lesser Scaup Duck—*Marila affinis.* Common transient. Average date of spring arrival, March 29 (five years); earliest date of spring arrival, March 12, 1911; average date of fall departure, November 11 (four years); latest date of fall departure, November 14, 1915.

Ring-necked Duck—*Marila collaris.* Common transient; average date of spring arrival, April 4 (two years); average date of fall departure, November 7 (six years); latest date of fall departure, November 14, 1915.

Golden-eye—*Clangula clangula americana.* Transient. Earliest date of arrival from north, October 7, 1907; latest date of fall departure, November 5, 1911.

Buffle-head, or Butter-ball—*Charitonetta albeola.* Transient. Owing to the short wings of this little duck, their flight is accompanied by a whistling sound. Average date of spring arrival, April 10 (two

years); earliest date of spring arrival, April 7, 1912; average date of fall departure, November 10 (five years); latest date of fall departure, November 14, 1915.

Northern Eider—*Somateria mollissima borealis.* An individual of this species was shot about forty miles north of here November 4, 1911. It was mounted by a taxidermist and the last I heard of it, it was in the possession of Wm. Sweet. A short time after it was mounted I sent it to the Biological Survey at Washington, D. C., and it was passed upon by this department as the first authentic record for the interior of the United States. This bird had wandered about two thousand miles from its regular habitat. (See the *Auk*, page 535, XXIX. 1912).

White-winged Scoter, or "African Goose"—*Oidemia deglandi.* Transient. October 26, 1911, a flock of seven; October 24, 1915, several.

Ruddy Duck—*Erismatura jamaicensis.* Common transient, a few remain to nest. Average date of spring arrival, April 15 (two years); earliest date of spring arrival, April 7, 1912; average date of fall departure, November 10 (six years); latest date of fall departure, November 28, 1915.

Snow Goose or White Brant—*Chen hyperboreus hyperboreus.*

Greater Snow Goose—*Chen hyperboreus nivalis.* Transient. I have included the migration data of these two forms together, because it would be only guess-work to try to keep separate data unless one could shoot one out of each flock. Average date of spring arrival, March 18 (three years); earliest date of spring arrival, March 12, 1911; average date of spring departure, April 7 (four years); latest date of spring departure, April 11, 1911; earliest date of fall arrival, September 3, 1911; latest date of fall departure, November 14, 1909.

Blue Goose—*Chen caerulescens.* Transient; often seen with flocks of Snow Geese. Average date of spring arrival, March 13 (two years).

White-fronted Goose, or Brant—*Anser albifrons gambeli.* Average date of spring arrival, March 11 (two years); average date of departure in spring, April 3 (three years); date of departure in fall, November 10, 1907.

Canada Goose—*Branta canadensis canadensis.*

Hutchins Goose—*Branta canadensis hutchinsi.* Both forms common transients. Migratory data included together. Average date of spring arrival, March 7 (five years); earliest date of spring arrival, March 3, 1908; latest date of spring departure, April 7, 1912; earliest

date of fall arrival, October 10, 1907; latest date of fall departure, November 7, 1907.

Cackling Goose—*Branta canadensis minima.* There was a specimen in a local collection that had been shot in this vicinity.

Whistling Swan—*Olor columbianus.* Rare transient; several have been shot in past years. Fred Pruner mounted one in March, 1908. I saw another in a drug store window quite a few years ago but I do not remember the date; this particular one had been wounded and was alive when on exhibition.

Bittern—*Botaurus lentiginosus.* A common summer resident of the marshes; breeds in suitable localities. Average date of spring arrival, April 19 (six years); earliest date of spring arrival, April 10, 1910; average date of fall departure, October 29 (seven years); latest date of fall departure, November 20, 1910.

Least Bittern—*Ixobrychus exilis.* Rare summer resident of the marshes; not common; May 11, 1908; August 25, 1908; latest date of fall departure, October 8, 1911.

Great Blue Heron—*Ardea herodias herodias.* Summer resident along the river and creeks. Average date of spring arrival, April 10 (two years); average date of fall departure, October 26 (two years).

Green Heron—*Butorides virescens virescens.* Summer resident along the river and creeks around timber; breeds. Average date of spring arrival, May 13 (four years); earliest date of spring arrival, May 7, 1911; average date of fall departure, September 24 (three years); latest date of fall departure, October 7, 1907.

Black-crowned Night Heron—*Nycticorax nycticorax naevius.* Summer resident; breeds in colonies along the river and creeks and around sloughs in favorable localities. This is the bird that is often heard about the sloughs and along the river at all hours of the night. The "squawck" is about the only song it has. Average date of spring arrival, April 30 (six years); earliest date of spring arrival, April 18, 1909; average date of fall departure, October 18 (six years); latest date of fall departure, November 20, 1910.

Whooping Crane—*Grus americana.* One was shot about twenty years ago a few miles northwest of the city.

Little Brown Crane—*Grus canadensis.*

Sandhill Crane—*Grus mexicana.* Common transients. Owing to their similarity their migration data are included together. Both of these Cranes occur in large flocks during migrations, circling and

wheeling about high in the air; their loud bugle-like notes can be heard for miles on still days. Average date of spring arrival, April 3 (five years); earliest date of spring arrival, March 28, 1909; average date of spring departure, April 17 (two years); latest date of spring departure, April 23, 1916; earliest date of arrival from the north, September 27, 1908; latest date of fall departure, October 22, 1908.

King Rail—*Rallus elegans.* Rare summer resident of the marshes; breeds. Found with young in 1910 and 1911 about some sloughs near Humboldt.

Virginia Rail—*Rallus virginianus.* Summer resident of the marshes; breeds. September 10, 1909.

Carolina Rail—*Porzana carolina.* Common summer resident; breeds. Average date of spring arrival, May 12 (two years); average date of fall departure, October 5 (three years); latest date of fall departure, October 17, 1909.

Florida Gallinule—*Gallinula galeata.* Rare. John Green showed me one November 7, 1911, that he was about to mount; it was shot near here.

Coot, or Mud-hen—*Fulica americana.* A very common summer resident of the sloughs; breeds. Average date of spring arrival, April 4 (five years); earliest date of spring arrival, March 27, 1910; average date of fall departure, November 7 (seven years); latest date of fall departure, November 27, 1910.

Northern Phalarope—*Lobipes lobatus.* Rare. I saw one in a local collection.

Wilson's Phalarope—*Steganopus tricolor.* Common summer resident of the marshes; breeds. This bird is extraordinary in that the female is the larger and most brightly plumaged; another striking peculiarity is that the male does most of the incubating of eggs and takes care of the newly hatched young. Average date of spring arrival, May 10 (four years); earliest date of spring arrival, May 5, 1912; average date of fall departure, October 12 (two years); latest date of fall departure, October 13, 1908.

Avocet—*Recurvirostra americana.* Rare. Otto Stangohr had mounted a specimen years ago.

Woodcock—*Philohela minor.* Rare. One flushed along the river July 25, 1909.

Wilson's Snipe—*Gallinago delicata.* Transient, especially common about the marshy sloughs. Average date of spring arrival, March

29 (five years); earliest date of spring arrival, March 15, 1908; average date of fall departure, November 7 (six years); latest date of fall departure, November 22, 1915.

Stilt Sandpiper—*Micropalama himantopus.* Rare transient; seen May 14, 1911; first migrants from the north seen July 9, 1911.

Pectoral Sandpiper—*Pisobia maculata.* Common transient, usually about marshes. Average date of spring arrival, April 15 (five years); earliest date of spring arrival, April 7, 1912; average date of spring departure, May 24 (six years); latest date of spring departure, June 11, 1911 (straggler); average date of arrival from north, July 24 (three years); earliest date of arrival from north, July 23, 1910; average date of fall departure, October 18 (four years); latest date of fall departure, November 5, 1911.

White-rumped Sandpiper—*Pisobia fuscicollis.* Transient; not common. May 5 to 12, 1912; September 3, 1911.

Baird's Sandpiper—*Pisobia bairdi.* Transient in the marshes. May 2 to 16, 1907; June 11, 1911, several.

Least Sandpiper—*Pisobia minutilla.* Common transient of the marshes. Average date of spring arrival, May 6 (four years); earliest date of spring arrival, May 2, 1909; average date of spring departure, May 18 (four years); latest date of spring departure, May 21, 1911; earliest date of arrival from north, August 14, 1910; latest date of fall departure, September 3, 1911.

Semipalmated Sandpiper—*Ereunetes pusillus.* Common transient. Average date of spring arrival, May 8 (three years); earliest date of spring arrival, May 5, 1912; average date of spring departure, May 20 (three years); latest date of spring departure, May 28, 1911; latest date of fall departure, September 3, 1911.

Hudsonian Godwit—*Limosa haemastica.* Rare transient. I caught one with an injured wing, April 25, 1909.

Greater Yellow-legs—*Totanus melanoleucus.* Transient, not as common as the Yellow-legs. Average date of spring arrival, April 24 (four years); earliest date of spring arrival, April 11, 1909; latest date of fall departure, October 29, 1911.

Yellow-legs—*Totanus flavipes.* Common transient. Average date of spring arrival, April 28 (seven years); earliest date of spring arrival, April 11, 1909; average date of spring departure, May 26 (three years); latest date of spring departure, June 11, 1909 (stragglers); average date of arrival from north, July 24 (three years); average date of fall departure, October 9 (four years); latest date of fall departure, October 19, 1907.

Solitary Sandpiper—*Helodromas solitarius solitarius.* Common transient; chiefly along the river. Average date of spring arrival, May 8 (two years); earliest date of spring arrival, May 4, 1906; average date of fall departure, September 10 (five years); latest date of fall departure, September 29, 1907.

Western Willet—*Catoptrophorus semipalmatus inornatus.* Rare transient. One observed for several minutes May 5, 1912, feeding on the shore of Beaver Lake.

Upland Plover—*Bartramia longicauda.* Summer resident; nests in suitable places on the prairie. Average date of spring arrival, May 10 (six years); earliest date of spring arrival, May 1, 1910; average date of fall departure, August 30 (three years); latest date of fall departure, September 6, 1908. Earliest nest with eggs, June 7, 1908.

Buff-breasted Sandpiper—*Tryngites subruficollis.* Rare. Small flock carefully observed May 12, 1912.

Spotted Sandpiper—*Actitis macularius.* Common summer resident, especially along the river and creeks, but also along the sandy stretches along the shores of the lakes; breeds. Average date of spring arrival, May 7 (seven years); earliest date of spring arrival, April 10, 1910; average date of fall departure, October 5 (six years); latest date of fall departure, October 13, 1908.

Black-bellied Plover—*Squatarola squatarola cynosurae.* Rare transient. On November 7, 1911, John Green showed me one that had been taken that fall.

Golden Plover—*Charadrius dominicus dominicus.* Transient. May 23, 1909 (one year); average date of fall departure, October 10 (three years); latest date of fall departure, October 11, 1907.

Killdeer—*Oxyechus vociferus.* Very common summer resident in pastures and meadows; breeds. Average date of spring arrival, March 23 (seven years); earliest date of spring arrival, March 12, 1908; average date of fall departure, October 24 (six years); latest date of fall departure, November 7, 1915.

Semipalmated Plover, or Ring Plover—*Aegialitis semipalmata.* Transient. Average date of spring arrival, May 11 (three years); earliest date of spring arrival, May 5, 1912.

Ruddy Turnstone—*Arenaria interpres morinella.* Rare; small flock seen May 5, 1912, at Beaver Lake.

Bob-white—*Colinus virginianus virginianus.* Common resident. Nearly every grove on the prairie has its family of quail in the summer.

Prairie Chicken, or Pinnated Grouse—*Tympanuchus americanus americanus.* Common resident (formerly), nesting in favorable localities.

Ring-necked Pheasant—*Phasianus torquatus.* A few were liberated about 1910, and are met with occasionally along the river south of the city. I saw several in 1911.

Western Mourning Dove—*Zenaidura macroura marginella.* Common summer resident; breeds. I shot one April 16, 1916, and sent it to the Biological Survey for verification; it was there pronounced *Zenaidura macroura marginella.* Average dat of spring arrival, April 13 (four years); earliest date of spring arrival, March 25, 1909; average date of fall departure, October 7 (six years); latest date of fall departure, October 17, 1909.

Turkey Vulture, or Turkey Buzzard—*Cathartes aura septentrionalis.* Not a very common summer visitant.

Marsh Hawk—*Circus hudsonius.* Common summer resident of the prairies; breeds. Average date of spring arrival, March 15 (six years); earliest date of spring arrival, March 5, 1911; average date of fall departure, October 31 (seven years); latest date of fall departure, November 13, 1909.

Sharp-shinned Hawk—*Accipiter velox.* Common summer resident; breeds. Earliest date of spring arrival, April 18, 1909; latest date of fall departure, November 15, 1914.

Cooper's Hawk—*Accipiter cooperi.* Occasionally seen during migrations. April 11, 1909.

Goshawk—*Astur atricapillus atricapillus.* This is the real Chicken Hawk; found occasionally during winter. November 15, 1908.

Red-tailed Hawk—*Buteo borealis borealis.* Summer resident; breeds. October 14, 1914.

Swainson's Hawk—*Buteo swainsoni.* Summer resident; breeds.

Rough-legged Hawk—*Archibuteo lagopus sancti-johannis.* Not an uncommon winter visitor. Average date of fall arrival, November 31 (three years); earliest date of fall arrival, November 19, 1911; average date of spring departure, March 19 (two years); latest date of spring departure, March 31, 1908.

Golden Eagle—*Aquila chrysaetos.* Rare visitant. This and the Bald Eagle are the birds that are always shot whenever there is opportunity to do so, and later they are mounted to decorate some clubroom or den. Surely a poor monument for the King of Birds.

Bald Eagle—*Haliaeetus leucocephalus leucocephalus.* Rare. Two were taken here in the fall of 1911.

Prairie Falcon—*Falco mexicanus.* Only one record, May 5, 1912.

Pigeon Hawk—*Falco columbarius columbarius.* Transient.

Sparrow Hawk—*Falso sparverius sparverius.* Common summer resident; breeds. Average date of spring arrival, April 10 (three years); earliest date of spring arrival, March 26, 1911; average date of fall departure, October 28 (two years); latest date of fall departure, November 20, 1909; earliest nest with eggs, May 14, 1911.

Long-eared Owl—*Asio wilsonianus.* Resident; breeds.

Short-eared Owl—*Asio flammeus.* Resident; breeds. Mostly found about marshes and old fields. In the winter often found about the river.

Barred Owl—*Strix varia varia.* Not common; one was seen on February 16, 1909.

Saw-whet Owl—*Cryptoglaux acadica acadica.* Resident; not common. I took one in the winter of 1901-02, and I saw another a year later.

Screech Owl—*Otus asio asio.* Common resident; breeds. Every farm grove seems to have a family of these little owls. Earliest nest with eggs, April 18, 1909.

Great Horned Owl—*Bubo virginianus virginianus.* Resident in the heavy timber; breeds.

Arctic Horned Owl—*Bubo virginianus subarcticus.* Rare winter visitor. Found one dead, November 23, 1907.

Snowy Owl—*Nyctea nyctea.* An irregular winter visitor: latest date seen in spring, March 6, 1910. The Snowy Owl is far more common than my records show. It was not always convenient for me to cover the territory in the country where it is found in the winter. Perhaps an observing farmer would find them more abundant.

Burrowing Owl—*Speotyto cunicularia hypogaea.* A common summer resident in suitable localities; breeds.

Yellow-billed Cuckoo, or Rain Crow—*Coccyzus americanus americanus.* Common summer resident; breeds. Average date of spring arrival, May 27 (two years); earliest date of spring arrival, May 23, 1909; average date of fall departure, August 24 (two years); latest date of fall departure, August 27, 1911.

Black-billed Cuckoo—*Coccyzus erythrophthalmus.* Common summer resident; breeds. Cuckoos are often heard during the night uttering their peculiar cries as they fly about. They are especially noisy on cloudy evenings just before a storm. Latest date of fall departure, September 22, 1907.

Belted Kingfisher—*Ceryle alcyon alcyon.* Common summer resident along the river and about the lakes where it can obtain its food. Average date of spring arrival, April 7 (four years); earliest date of spring arrival, March 24, 1909; average date of fall departure, October 30 (four years); latest date of fall departure, November 28, 1909. 1909.

Hairy Woodpecker—*Dryobates villosus villosus* (possibly *D. v. leucomelas*). Common resident; breeds.

Downy Woodpecker—*Dryobates pubescens medianus.* Common resident; breeds.

Yellow-bellied Sapsucker—*Sphyrapicus varius varius.* Transient; a few may breed. Very common some years. May 15 to 20, 1907; September 24, 1911.

Red-headed Woodpecker—*Melanerpes erthrocephalus.* Common summer resident; breeds. Average date of spring arrival, May 22 (six years); earliest date of spring arrival, May 12, 1912; average date of fall departure, September 13 (two years); latest date of fall departure, September 20, 1908.

Northern Flicker—*Colaptes auratus luteus.* Common summer resident; breeds. Average date of spring arrival, April 3 (six years); earliest date of spring arrival, March 16, 1910; average date of fall departure, November 10 (six years); latest date of fall departure, December 25, 1911; earliest nest with young, May 30, 1911.

Red-shafted Flicker—*Colaptes cafer collaris.* Occasionally seen during the summer. Most of these are hybrids between this and the Northern Flicker.

Night-hawk—*Chordeiles virginianus virginianus.* Common summer resident; breeds. Average date of spring arrival, May 20 (seven years); earliest date of spring arrival, May 12, 1912; average date of fall departure, September 16 (six years); latest date of fall departure, October 1, 1908.

Chimney Swift—*Chaetura pelagica.* Common summer resident of the towns; breeds. Average date of spring arrival, May 10 (eight years); earliest date of spring arrival, May 2, 1912; average date of fall departure, August 26 (five years); latest date of fall departure, September 11, 1908.

Ruby-throated Hummingbird—*Archilochus colubris.* Rare summer resident, more common as a transient. May 26, 1907; August 27, 1911.

Kingbird—*Tyrannus tyrannus.* Very common summer resident; breeds. Average date of spring arrival, May 12 (ten years); earliest

date of spring arrival, May 5, 1912; average date of fall departure, September 6 (five years); latest date of fall departure, September 10, 1909; earliest nest with eggs, July 2, 1911.

Arkansas Kingbird—*Tyrannus verticalis.* Common summer resident; breeds. Average date of spring arrival, May 10 (ten years); earliest date of spring arrival, May 3, 1905; average date of fall departure, September 2 (six years); latest date of fall departure, September 8, 1907; earliest date of nest with eggs, July 1, 1911.

Phoebe—*Sayornis phoebe.* Common summer resident; breeds. Average date of spring arrival, April 9 (six years); earliest date of spring arrival, March 29, 1908; average date of fall departure, October 2 (two years); latest date of fall departure, October 13, 1907; earliest nest with eggs, June 14, 1908.

Olive-sided Flycatcher—*Nuttallornis borealis.* Rare transient. May 23, 1909.

Wood Pewee—*Myiochanes virens.* Fairly common summer resident; breeds. May 10, 1908.

Yellow-bellied Flycatcher—*Empidonax flaviventris.* Rare; one record. May 31, 1908.

Traill's Flycatcher—*Empidonax trailli trailli.* Common summer resident; breeds. Our commonest flycatcher. Average date of spring arrival, May 19 (three years); earliest date of spring arrival, May 10, 1908; earliest date of nest with eggs, July 1, 1911.

Least Flycatcher—*Empidonax minimus.* Common as a transient; a few remain to breed. Average date of spring arrival, May 15 (four years); earliest date of spring arrival, May 10, 1908.

Prairie Horned Lark—*Otocoris alpestris praticola.* Common resident; breeds. I have sent skins of this form, that were shot in February and they were of this form. (*O. a. praticola*).

Saskatchewan Horned Lark—*Otocoris alpestris enthymia* Oberholser. A winter visitant.

Hoyt's Horned Lark—*Otocoris alpestris hoyti.* I have two records, February 2, 1908 and January 17, 1909.

Magpie—*Pica pica hudsonia.* Accidental visitor. I saw one flying along the river, October 31, 1914, and found a carcass of one floating in the river the very next day, November 1, 1914. Magpies are very common west of the Missouri River in this state and I am inclined to believe they will become more common in these parts.

Blue Jay—*Cyanocitta cristata cristata.* Common resident; breeds. Earliest nest with eggs, June 2, 1912.

Crow—*Corvus brachyrhynchos brachyrhynchos.* Common resident; breeds. Earliest nest with young, May 5, 1907.

Bobolink—*Dolichonyx oryzivorus.* Common summer resident of the prairies and meadows; breeds. Average date of spring arrival, May 9 (four years); earliest date of spring arrival, May 5, 1912; average date of fall departure, September 12 (five years); latest date of fall departure, September 20, 1908.

Cowbird—*Molothrus ater ater.* Common summer resident; breeds. I have found their eggs in the nests of Yellow Warbler, Song Sparrow, and Red-wings. Average date of spring arrival, April 21 (five years); earliest date of spring arrival, April 18, 1909.

Yellow-headed Blackbird—*Xanthocephalus xanthocephalus.* Common summer resident of the marshes; breeds. In the fall, they, with other Blackbirds, congregate in flocks of thousands about the grain fields and in the evening they gather in the sloughs to roost. Average date of spring arrival, April 30 (seven years); earliest date of spring arrival, April 17, 1910; average date of fall departure, September 26 (five years); latest date of fall departure, October 9, 1910.

Red-winged Blackbird—*Agelaius phoeniceus predatorius* (Wilson);

Northern Red-winged Blackbird—*Agelaius phoeniceus arctolegus* Oberholser. I shot two Red-wings April 23, 1916, and sent them to the Biological Survey; one was *predatorius* and the other *arctolegus.* Average date of spring arrival, March 14 (seven years); earliest date of spring arrival, March 6, 1910; average date of fall departure, November 8 (six years); latest date of fall departure, November 15, 1908. Red-wings are common breeders. Earliest nest with eggs, May 28, 1911.

Meadowlark—*Sturnella magna magna.*

Western Meadowlark—*Sturnella neglecta.* I sent one skin to the Biological Survey, shot April 23, 1916, where it was identified as *S. neglecta.* Both forms are common summer residents and breeders. They can be distinguished by the difference in song and call notes. The Western Meadowlark is more of a bird of the uplands, while the Eastern is more likely to be found along the river bottom and the lower valleys. This is not always the rule, however, and exceptions will be frequently found. Average date of spring arrival, March 13 (eight years); earliest date of spring arrival, March 7, 1909; average date of fall departure, October 30 (seven years); latest date of fall departure, November 10, 1907. The Western Meadowlark has several

songs. I was watching one one day and he sang no less than seven different variations and one of these he repeated fourteen times.

Orchard Oriole—*Icterus spurius.* Summer resident; breeds. Average date of spring arrival, May 12 (two years); date of fall departure, August 25, 1907.

Baltimore Oriole—*Icterus galbula.* Common summer resident; breeds. Average date of spring arrival, May 15 (eight years); earliest date of spring arrival, May 12, 1916; average date of fall departure, September 1 (two years); latest date of fall departure, September 3, 1911.

Bullock's Oriole—*Icterus bullocki.* Rare; one seen May 30, 1911.

Rusty Blackbird—*Euphagus carolinus.* Transient; difficult to distinguish in the field from the Brewer's Blackbird. I identified one in the flesh, October 27, 1907.

Brewer's Blackbird—*Euphagus cyanocephalus.* Common transient. Abundant about the sloughs in the fall. Average date of spring arrival, April 4 (four years); earliest date of spring arrival, March 28, 1909; average date of fall departure, November 14 (seven years); latest date of fall departure, November 28, 1907.

Bronzed Grackle—*Quiscalus quiscula aeneus.* Common summer resident along the river; many nest in the evergreens in Hunter's Grove. The Grackles are very fond of crayfish. Average date of spring arrival, March 25 (eight years); earliest date of spring arrival, March 19, 1911; average date of fall departure, November 9 (five years); latest date of fall departure, November 28, 1907; earliest nest with eggs, May 7, 1907.

Purple Finch—*Carpodacus purpureus purpureus.* Rare; one record, October 5 to October 27, 1908.

Crossbill—*Loxia curvirostra minor.* Rare. On November 27, 1910, I saw a flock of five, and they were so unafraid that I even caught one in my hand. They were feeding on some wild sunflowers and did not seem to mind my presence in the least.

White-winged Crossbill—*Loxia leucoptera.* Rare; one observed February 15, 1909.

English Sparrow—*Passer domesticus.* Common the year around; can be found in every town and village and on every farm. I have seen a number of albinos and many with albinistic tendencies.

Redpoll—*Acanthis linaria linaria.* Usually a regular winter visitor, more or less common. Average date of fall arrival, October 30 (two years); latest date of spring departure, March 24, 1909.

Goldfinch—*Astragalinus tristis tristis.* Common summer resident; breeds. Average date of spring arrival, May 15 (three years); earliest date of spring arrival, May 12, 1912; average date of fall departure, October 11 (four years); latest date of fall departure, November 26, 1911; wintered 1907-08.

Snow Bunting—*Plectrophenax nivalis nivalis.* Irregular winter visitor. Earliest date of fall arrival, November 10, 1907. My data on this bird are very meager. About the only time these birds are found here is during a blizzard or a short time afterward. Perhaps the country folks see this bird nearly every winter.

Lapland Longspur—*Calcarius lapponicus.* Common transient and occasionally in the winter. Average date of fall arrival, October 26 (five years); earliest date of fall arrival, October 20, 1907; average date of spring departure, April 4 (four years); latest date of spring departure, April 18, 1909.

Chestnut-collared Longspur—*Calcarius ornatus.* Transient. Their flight note is different from that of the Lapland Longspur.

Vesper Sparrow—*Pooecetes gramineus gramineus.* (Possibly *P. g. confinis*). Common summer resident; breeds. Average date of spring arrival, May 9 (three years); earliest date of spring arrival, April 25, 1909; average date of fall departure, September 21 (four years); latest date of fall departure, September 24, 1911.

Savannah Sparrow—*Passerculus sandwichensis savanna.* Common summer resident; breeds. Average date of spring arrival, May 2 (five years); earliest date of spring arrival, April 24, 1910; average date of fall departure, September 9 (two years); latest date of fall departure, September 15, 1907.

Grasshopper Sparrow—*Ammodramus savannarum autralis* .(Possibly *A. s. bimaculatus*) . Common summer resident; breeds. Average date of spring arrival, May 9 (five years); earliest date of spring arrival, May 5, 1912.

Henslow's Sparrow—*Passerherbulus henslowi.* Summer resident; breeds. Average date of spring arrival, May 9 (three years); earliest date of spring arrival, April 29, 1912; latest date of fall departure, October 4, 1914.

Leconte's Sparrow—*Passerherbulus lecontei.* Rare summer resident of the marshes. May 10, 1908.

Lark Sparrow—*Chondestes grammacus grammacus.* (Possibly *C. g. strigatus*) . A common summer resident of open woodland and

thickets. Average date of spring arrival, May 16 (six years); earliest date of spring arrival, May 7, 1911.

Harris's Sparrow—*Zonotrichia querula*. Average date of spring arrival, April 30 (seven years); earliest date of spring arrival, March 26, 1911; average date of spring departure, May 19 (five years); latest date of spring departure, May 24, 1908; average date of fall arrival, September 25 (five years); earliest date of fall arrival, September 18, 1910; average date of fall departure, November 3 (four years); latest date of fall departure, November 7, 1915.

White-crowned Sparrow — *Zonotrichia leucophrys leucophrys*. Common transient. Average date of spring arrival, May 4 (six years); earliest date of spring arrival, April 13, 1912; average date of spring departure, May 15 (three years); latest date of spring departure, May 16, 1909; latest date of fall departure, October 13, 1907.

White-throated Sparrow—*Zonotrichia albicollis*. Common transient. Average date of spring arrival, April 26 (five years); earliest date of spring arrival, April 18, 1916; average date of spring departure, May 21 (two years); latest date of spring departure, May 26, 1907; average date of fall arrival, September 27 (three years); earliest date of fall arrival, September 24, 1911; average date of fall departure, October 15 (two years); latest date of fall departure, October 17, 1909. The Harris's White-crowned and White-throated Sparrows are very good whistlers. They make the thickets fairly ring with their music, which is mostly a rather high-pitched "See, see, see" with variations. Besides this whistle, the Harris's Sparrow has another common note, best described as a chuckle.

Tree Sparrow—*Spizella monticola monticola*. Common winter visitor. Average date of fall arrival, October 19 (seven years); earliest date of fall arrival, October 4, 1908; average date of spring departure, April 23 (eight years); latest date of spring departure, May 7, 1907.

Chipping Sparrow—*Spizella passerina passerina*. Not a very common summer resident; breeds. Average date of spring arrival, May 12 (three years); earliest date of spring arrival, May 7, 1911.

Clay-colored Sparrow—*Spizella pallida*. Very common transient. Average date of spring arrival, April 30, 1916; latest date of fall departure, September 24, 1911.

Field Sparrow—*Spizella pusila pusila*. (Possibly *S. p. arenacea*).

Common summer resident in open groves on the hillsides and also pastures and meadows where there are clumps of currant and goose-

berry bushes and other shrubbery. Breeds. Average date of spring arrival, April 28 (seven years); earliest date of spring arrival, April 14, 1912; average date of fall departure, September 12 (three years); latest date of fall departure, September 19, 1909.

Slate-colored Junco—*Junco hyemalis hyemalis.* Very common transient; occasionally winters. Wintered 1907-08 in Hunter's Grove. Average date of spring arrival, April 4 (four years); earliest date of spring arrival, March 24, 1909; average date of spring departure, April 22 (five years); latest date of spring departure, May 8, 1907; average date of fall arrival, September 30 (three years); earliest date of fall arrival, September 24, 1907; average date of fall departure, October 28 (three years); latest date of fall departure, November 15, 1914.

Song Sparrow—*Melospiza melodia* (and subspecies). I shot a Song Sparrow April 23, 1916, and sent it to the Biological Survey where it was pronounced a Dakota Song Sparrow (*M. m. juddi*). Average date of spring arrival, March 27 (seven years); earliest date of spring arrival, March 20, 1910; average date of fall departure, October 12 (six years); latest date of fall departure, November 1, 1914. The Song Sparrow is a common breeder, earliest nest with young, July 4, 1907.

Lincoln's Sparrow—*Melospiza lincolni lincolni.* Common transient. On April 30, 1916, I shot a Lincoln's Sparrow and sent it to the Biological Survey for proof of identification. Average date of spring arrival April 27 (seven years); earliest date of spring arrival, April 17, 1910; average date of spring departure, May 20 six years); latest date of spring departure, May 23, 1909; average date of fall arrival, September 7 (four years); earliest date of fall arrival, August 27, 1911; average date of fall departure, October 3 (three years); latest date of fall departure, October 13, 1907.

Swamp Sparrow—*Melospiza georgiana.* Transient. Average date of spring arrival, May 3 (four years); earliest date of spring arrival, April 23, 1911; only fall date, September 24, 1911.

Fox Sparrow—*Passerella iliaca iliaca.* Transient. Earliest date of spring arrival, April 11, 1909; latest date of spring departure, May 7, 1907. Only fall dates, October 23, 1908; September 24, 1911. There used to be a place called Seney Island located by the falls of the Big Sioux where the Fox Sparrow could nearly always be found during migration.

Towhee — *Pipilo erythrophithalmus erythropthalmus.* Common summer resident of the woodland and along the river; breeds. Aver-

age date of spring arrival, May 3 (two years); average date of fall departure, September 25 (two years).

Arctic Towhee—*Pipilo maculatus arcticus.* Transient. I have observed this Towhee May 22, 1910; September 24, 1911, and on April 30, 1916. On the latter date I shot a male and a female and sent the skins to the Biological Survey for identification.

Rose-breasted Grosbeak—*Zamelodia ludoviciana.* Common summer resident; breeds. Average date of spring arrival, May 14 (nine years); earliest date of spring arrival, May 10, 1911. Average date of fall departure, September 5 (eight years); latest date of fall departure, September 15, 1907. Earliest nest with young, June 30, 1907. Potato-bugs and a sort of a scale that infests willow trees seem to be the favorite food of the Grosbeak.

Indigo Bunting—*Passerina cyanea.* Summer resident; breeds. May 23, 1909.

Dickcissel—*Spiza americana.* Common summer resident; breeds. Usually seen perching on telephone wires or tall weeds, keeping up an intermittent "chip, chip, chip, zee, zee, zee, zee." Average date of spring arrival, May 26 (six years); earliest date of spring arrival, May 14, 1911; average date of fall departure, August 18 (three years); latest date of fall departure, August 27, 1911.

Lark Bunting—*Calamospiza melanocorys.* Uncommon summer resident; probably breeds. May 11, 1908, and May 16, 1915.

Scarlet Tanager—*Piranga erythromelas.* Rare summer resident; breeds. Earliest May 26, 1912.

Purple Martin—*Progne subis subis.* Common wherever there are birdhouses; breeds. Average date of spring arrival, April 22 (nine years); earliest date of spring arrival, April 9, 1910; average date of fall departure, August 28 (five years); latest date of fall departure, September 2, 1910.

Cliff Swallows—*Petrochelidon lunifrons lunifrons.* Common summer resident; breeds. These Swallows build their mud nests on the outside walls of barns, graneries, etc. Average date of spring arrival, May 21 (three years); earliest date of spring arrival, May 16, 1909; average date of fall departure, September 8 (two years); latest date of fall departure, September 10, 1911.

Barn Swallow—*Hirundo erythrogastra.* Common summer resident; breeds. This swallow builds its nest on rafters on the inside of barns, sheds, etc. Average date of spring arrival, May 2 (six years); earliest date of spring arrival, April 19, 1908; average date of fall

departure, October 5 (seven years); latest date of fall departure, October 13, 1908; earliest nest with eggs, June 16, 1907.

Tree Swallow—*Iridoprocne bicolor*. Uncommon summer resident. Average date of spring arrival, May 12 (three years); earliest date of spring arrival, May 7, 1911.

Bank Swallow—*Riparia riparia*. Common summer resident; breeds. Very common along the river. Nests in holes in banks and cliffs, usually in colonies. Average date of spring arrival, May 8 (eight years); earliest date of spring arrival, May 3, 1906; average date of fall departure, August 28 (five years); latest date of fall departure, September 5, 1907.

Rough-winged Swallow—*Stelgidopteryx serripennis*. Common summer resident; breeds. Nests like the preceding but in small colonies, sometimes just one pair occupying a single burrow in a bank or cliff. Average date of spring arrival, May 15 (six years); earliest date of spring arrival, May 9, 1909.

Bohemian Waxwing—*Bombycilla garrula*. Irregular winter visitor. A small flock observed February 19, 1911.

Cedar Waxwing—*Bombycilla cedrorum*. Common during migrations; a few remain in summer.

Northern Shrike—*Lanius borealis*. A somewhat irregular winter visitor. Average date of fall arrival, November 21 (six years); earliest date of fall arrival, November 10, 1907; average date of spring departure, March 9 (four years); latest date of spring departure, March 17, 1912.

White-rumped Shrike—*Lanius ludovicianus excubitorides*. Common summer resident; breeds, usually building the nests in the Cottonwoods. Average date of spring arrival, April 4 (three years); earliest date of spring arrival, March 26, 1911; average date of fall departure, November 1 (three years); latest date of fall departure, November 13, 1910.

Red-eyed Vireo—*Vireosylva olivacea*. Summer resident; breeds. The song of this Vireo is somewhat similar to the Robin's. Average date of spring arrival, May 21 (three years); earliest date of spring arrival, May 12, 1912; average date of fall departure, September 16 (two years); latest date of fall departure, September 24, 1911.

Philadelphia Vireo—*Vireosylva philadelphica*. Rare. Mr. C. E. Holmes picked up a dead bird that was of this species. I identified one May 31, 1908.

(*To be Continued*)

THE WILSON BULLETIN

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EDITORIAL

Thirty years is quite a long time for one man to sit in an editorial chair—and thirty-six years is still longer. For thirty-six years Lynds Jones has sat in the editorial chair of the Wilson Ornithological Club. For thirty years, excepting the year 1901, he has assembled the copy, read the proof, distributed the magazines, jollied the printer, and otherwise piloted the WILSON BULLETIN.

During this period the WILSON BULLETIN has experienced some growth and expansion; it did not burst into being, fully-formed, Minerva-like! Such growth has not come spontaneously, but as the result of long and patient and nourishing care.

Perhaps the two greatest editors of American ornithological periodicals have been Dr. J. A. Allen and Dr. Elliott Coues. Dr. Allen, besides his long service and his mastery of organization in publication detail, stands out conspicuously for his unequalled ability in reviewing contemporaneous literature. His reviews, both expository and critical, created the impression of judicial finality. Dr. Coues' editorial service, though relatively short, is made memorable through the literary style and the pungency of his editorial columns. He was a spectacular writer, whose diction was marvelous.

Dr. Jones has been a builder. Starting with nothing he has, with tenacious persistence, built a magazine and has captained it through many severe trials and adversities. In the early years, from 1892 to 1900, each issue might have been the last one—and in numerous instances would have been the last one had not Dr. Jones paid up a financial deficit out of his own pocket. The accrued total of these deficits up to 1914 amounted to several hundred dollars.

During these early years many other similar amateur journals of ornithology perished by the wayside. The fact that the WILSON BULLETIN survived is chiefly due to the sacrifice, loyalty, and persistence of one man. And this may be said without grudging the meed of praise to others who have lent a helping hand through the years.

We must also recognize that the WILSON BULLETIN was the cradle of the Wilson Ornithological Club in its infancy. Without the molding and welding influence of the publication the organization would certainly have disintegrated.

It seems to us, therefore, that Dr. Jones occupies a keystone position in the present organization of our Club. A man may never be fully and rightly appraised during his life-time, but it is possible that his work be in some measure recognized and appreciated. This, it is certain, our Club wishes to do in the case of our retiring Editor.

Those who have been with us as members for some years may know something of the financial struggle to keep the Club's publication in the open current —though they may not know the inside story. We hope to be able sometime to tell this story.

While Dr. Jones is now relieved of some of the burdensome duties of editorship it does not mean that he has retired from actual service. We trust that his name will appear more frequently in the pages of the BULLETIN, as author, than heretofore. We hope also to have the benefit of his counsel in formulating the future policies of the Club's publication.

Complete sets of the WILSON BULLETIN are no longer obtainable from the Club. This being the case an effort should be made to conserve the existing sets so far as possible. Nothing will be so helpful to this end as to have a list of the known sets in existence. Therefore, the WILSON BULLETIN solicits information as to the location of all complete sets, or nearly complete sets, of this magazine. Such a list will then be published when it seems to be reasonably complete. We would also like to know about how many of our readers are having the BULLETIN bound.

At the Nashville meeting of the Wilson Club there was some talk in a small group relative to a possible round-robin communication among amateur bird photographers. The consensus of opinion was that there should be some clearing-house, or medium of exchange of practical experiences. Many who are beginners in this business and others who may rate as experienced amateurs often need advice or information on some matter of equipment, of material, or of methods. The problem is to bring together the man who knows and the man who wants to know. The WILSON BULLETIN will be glad to sponsor such a movement if there is any desire for it on the part of the readers.

Word has come from officers of the Club to the effect that something over $400 has already been subscribed to the "Better Bulletin Club". The Editor is not informed whether this sum includes the increase in dues from changes in membership classification; or whether it represents straight contributions. In either case the funds will be applied first to liquidation of accrued deficits and then to improvement of the WILSON BULLETIN. Probably it will take $500.00 to clear our slate, and it seems that we are within one hundred dollars of that amount now. The Editor pledges himself to do his part to keep the publication expenses within the budget of income. We will run on a pay-as-we-go basis.

GENERAL NOTES

Conducted by M. H. Swenk

The Scissor-tailed Flycatcher in Kentucky—Sunday morning, August 27, 1924, while sitting on the porch, a rather large bird flew from, or from the direction of, a small orchard across the avenue (west) and perched on one of the telephone wires immediately in front of my residence on Macey Avenue, Versailles, Kentucky, where it was instantly and easily recognized as a Scissor-tailed Flycatcher (*Muscivora forficata*). After some twenty minutes it flew on, continuing in the direction originally taken. Contrary to the usual habit of flycatchers it was very quiet, hardly moving during its stay and when leaving, while the flight strokes were so even and regular that they were slow, and the bird's transit correspondingly so. The bird did not seem to be sick. Its head was not drooped nor the plumage disordered. It showed no evidence of having been wounded, but presented a picture of weariness almost to exhaustion. No effort was made to secure it, as I am not a collector, but the identification was positive.—L. Otley Pindar, *Versailles, Ky.*

A Late Autumnal Record for the Bachman's Warbler (*Vermivora bachmani*).—On the night of September 23, 1924, a young male Bachman's Warbler struck the lighthouse on Tybee Island, Georgia, and was sent to Savannah with eighty-eight other specimens of birds by the keeper of the light. Mr. Gilbert R. Rossignol wrote to me about the Bachman's Warbler and at my request sent the bird to me. It is a young male in first winter plumage.

This is the latest record for the United States by eighteen days, the previous latest record being for Key West, Florida, September 5, 1888. Key West is Lat. 24° 32′ 58″ N. and Savannah is Lat. 32° 4′ 52″ N., a difference of eight degrees of latitude. This Tybee Island Bachman's Warbler must have been raised in the Mississippi Valley region, probably in northeast Arkansas, as the birds breed very much later in that region than they breed in South Carolina, near Charleston, for I have full complements of five eggs from the latter locality that were heavily incubated as early as March 28, while the birds do not breed in Arkansas until the second week in May.

The Bachman's Warbler has left South Carolina before the advent of August; the latest date I have is a young male taken by me on July 16, 1919, and which, by the way, is the only one I have seen in the late summer during the past forty-two years I have devoted to the study of birds.—Arthur T. Wayne, *Mount Pleasant, S. C.*

The Pine Grosbeak at Sioux City, Iowa.—On November 2, 1924, a party of eight or ten people were making a field trip in the region immediately north of Stone Park. In one of the open ravines a splendidly plumaged male Pine Grosbeak (*Pinicola enucleator leucura*) was encountered. It was about twenty-five feet up in a green ash tree, feeding upon the seeds. The party examined the bird for some time through field glasses, and then cautiously approached until directly under the tree. It was finally necessary to make some disturbance in order to see the bird in flight. The Pine Grosbeak is a very unusual visitor in this region. The record here reported seems to be the first well-authenticated one for this vicinity and is published without hesitation.—T. C. Stephens, *Sioux City, Iowa.*

The Nest of the Magpie.—My studies of the Magpie (*Pica pica hudsonia*) have all been made in Montana, particularly in the prairie region of the eastern half of the state. The nest may be built in either a bush or a tree. When built in a bush the nest may be as low as five feet from the ground. The Buffalo-berry is very commonly chosen by the Magpie for a nesting site. The thorns on this bush may afford some degree of protection to the birds, though it is doubtful if this is more than an accidental relation. The bush nest is usually constructed around the central bush stem, involving other branches as the bulk of the nest spreads outward. Tree nests are seldom over twenty feet from the ground. They are often located some distance out on a horizontal limb, and the nest is anchored to one or more erect branches on this limb.

The nests are built of small sticks which are derived mostly from sage brush and cottonwood trees. The lining is composed of the soft, inner bark of the same woods. I have never noticed any mud in the structure or lining of these nests. I have found nests located as far as four miles from any natural mud. I do not believe that Magpies in this region characteristically use mud in the construction of their nests. Some of the nests are as large as two feet in diameter and thirty inches high. An entrance is placed near the center of one side, and is usually directly over a limb or branch. The latter is used especially by the young birds as they are learning to leave the nest, and from which they may easily and quickly retreat into the nest.—W. R. Felton, *Sioux City, Iowa.*

Nesting Habits of the Magpie.—Few birds can offer more for observation and study through their nesting habits than the Magpie (*Pica pica hudsonia*). These birds are very crafty and always seek to place their nest where they will not be disturbed. Frequently, in the western states, I have noted that if their nests are disturbed they will not return to that locality the next nesting season, but will proceed to find some isolated place where they can rear their young unmolested. In the earlier days when the scanty population paid little attention to these birds they would frequently build their nests in the trees along the small streams flowing through the mountain valleys. Here, year after year, they were allowed to nest unmolested. But, as civilization progressed and the birds finally brought themselves into disrepute by their unwelcome visits to the nearby farms, they were hunted as a pest. Bounties were placed upon their heads by the state and as a result their nests were robbed by the hunters, who found it an easy catch to discover a nest full of nearly full grown birds. As soon as their nests were disturbed, in this manner, they at once sought the most unfrequented places of the higher mountains, so that it is difficult to find a nest, even when days are spent in searching the mountain side.

Their nests are carefully built. A pair usually selects some inaccessible bushy tree, usually a thorn tree near the top of some desolate canyon slope. The nest is built near the top of the tree. They select small dead branches and sticks, and carefully weave them about the closely packed branches of the thorn tree. After they have completed their task the nest closely resembles a crudely constructed cage. Every stick is tightly woven in its place making a very strong structure on all sides. In fact it requires great effort to break into one of their nests. The entire nest is about the size of two half-bushel baskets, placed top to top. Usually one opening about five inches in diameter is left on one side, although two openings may be seen. The nest proper, on the inside of the cage,

is then built with small sticks and dead grass. They do not line their nest with feathers or down as is often done by small song birds. The inside of their nest resembles very much that of a Crow's nest and shows the efforts of a stable nest builder.

Usually two to six eggs are laid, and after due time the young are hatched. The parents carry food to them and take every good care of them. The young are thus cared for until their eyes are open and they develop strength enough to move about. At this point in their career the parent bird promptly weaves in sticks closing the holes. The young birds then become prisoners. Food is supplied to them through the cracks in the cage by the old birds. When the young reach maturity and are fully feathered and able to fly, the door is opened by the parents and the young go free. It seems that these young birds tend to leave the nest without the slightest hesitation, even long before they are fully feathered. Hence the old birds take this means to guard their young until they are able to care for themselves. This seemed to be the common practice with the Magpies in southeastern Washington, in the vicinity of Walla Walla; but I have also observed the habit in northeastern Washington, three hundred miles northward.*—A. C. Starry, *Sioux City, Iowa.*

The Odd Behavior of a Stunned Ruffed Grouse.—One sunny afternoon last fall a female Ruffed Grouse (*Bonasa umbellus umbellus*), flew violently against our screen door and there fell to the porch floor. The impact was considerable, but the yielding screen must have broken the force of the collision somewhat, for the bird picked itself up and scurried under a porch seat, where it remained for about fifteen minutes. It then came out, walked to the corner of the porch partially screened by a climbing rose, and, taking a position there, remained for almost two hours, calmly resting.

An observer, seated in plain sight at a low window about ten feet away, kept the grouse under observation during the whole time, indulging in a long monologue directed at the visitor, including many sentimental assurances that a real refuge had been found. To all this the bird paid almost no attention, maintaining an air of complete indifference, and at times turning away its tranquil eyes as though unconscious of any human presence. The demeanor of the grouse expressed not only outward calm, but inward serenity.

Suddenly a cat appeared, passing along the sidewalk. Immediately the whole aspect of the grouse changed to one of alertness, as she shifted her position to keep the cat in range. Surely, now the bird would fly. But not so. As the cat trotted out of sight, the grouse settled down again to enjoy her sunny haven. It began to seem as though some serious injury might be the cause of her reluctance to leave. But evidently not, for as the afternoon waned and changed to dusk, the grouse hopped to the ground, stood around the door step for a few minutes, and them flew away on strong wings to a distant field.

Mr. C. W. Mayhew, who has hunted and trapped along this valley of Baughman Creek for sixty years, says he had not seen a Ruffed Grouse near this village for ten years. But not long after the incident related above, he flushed a pair in the valley back of my house.—Marcia B. Clay, *North Bristol, Ohio.*

*Apparently, however, the habit of closely imprisoning their young until they are able to fly and then suddenly liberating them is not general with the Magpie, as witness the preceding note. It would be interesting to know if any other ornithologists are able to corroborate Dr. Starry's observation.—Ed.

Some Kentucky Bird Notes.—On October 28, 1924, I saw about 150 Turkey Vultures (*Cathartes aura septentrionalis*) circling over a field about two miles from Bowling Green. On November 17, 1924, I again saw about the same number near the same place. I rarely see more than a dozen Turkey Vultures at any one time, especially in the late fall or early winter.

In late November, Mr. Carl D. Herdman, of my home town, called me by telephone to tell me to watch Central Park for Pine Siskins (*Spinus pinus pinus*). Several times I have visited the park and have found from 1000 to 1500 Pine Siskins roosting high up in maples. Professor L. Y. Lancaster and I hoped to trap some of them but were unable to reach them with a tall step-ladder and a long-handled net. The number of people passing at all hours of the day prevented our using traps.

I have in my possession a specimen of the Hermit Thrush (*Hylocichla guttata pallasi*) taken on the farm of A. T. Allbritten, near New Providence, Calloway County, Kentucky, January 3, 1925. This establishes a new winter record for this part of the state.—Gordon Wilson, *Bowling Green, Ky.*

Some Bird Notes from Bowling Green, Warren County, Kentucky.—Although I am in the habit of spending much of my leisure on Barren River and Drake's Creek, on only one occasion have I seen many Pied-billed Grebes (*Podilymbus podiceps*). On November 22, 1924, in a ten-mile trip, I counted ten of these birds. Not one of them took to the wing, but all quietly submerged when the boat came near. One miscalculated the speed of the boat and rose alongside it, not over five feet away.

On June 3, 1924, I saw at close range and studied carefully a flock of twelve or fifteen strange water birds, which were passing from one pond to another. I took careful notes on the birds and consulted Professor Gordon Wilson, who identified them as the Black-bellied Plover (*Squatarola squatarola*), the first record of the species for this area, so far as I know.

On December 26, 1924, I saw the Wilson's Snipe, the Marsh Hawk, the Red-headed Woodpecker and the Cowbird, all quite rare here in the winter. On January 3, 1925, I found the Belted Kingfisher and the Bronzed Grackle.

On January 12, 1925, I caught and banded a Southern Downy Woodpecker (*Dryobates pubescens pubescens*). As usual, it gave its S. O. S. call. In five seconds a dozen or more English Sparrows were near me, threatening me with their beaks and raising a lot of noise. Under ordinary conditions this woodpecker and the English Sparrow are inveterate enemies. Trouble seems to be a leveler, even in birdland.—L. Y. Lancaster, *Bowling Green, Ky.*

Some Notes on the Song of the Whip-poor-Will.—When we moved to the little farm which is our present home, in the early part of the year 1912, we watched eagerly for the coming of the spring migrants, that we might know what sort of bird neighbors we were to have. One evening early in April we were delighted to hear the song of a Whip-poor-will (*Antrostomus vociferus vociferus*) from a piece of pine woods, one corner of which was only 150 yards from the house. We noticed instantly that the song, while it had all the sweet, clear tone of the ordinary Whip-poor-will song, was not normal. It had what we might term an extra syllable in it, or, to be more accurate, it had an unusual addition to the first syllable. If one will imagine the song whistled "Whickup-poor-will," instead of "Whip-poor-will," he will have this unusual song exactly. This bird.

or a descendant that inherited his unusual song, nested in the pine woods every summer until 1922, or eleven years in all.

In the spring of 1923, a Whip-poor-will came to the woods at the usual time, but it was not our "Old Whickup," and we have not heard him since, though a pair have raised a brood at the same old stand in both the summers of 1923 and 1924.

"Old Whickup" often came to the lawn in the evening to sing. Some times he sat in the short grass, but more often on a horizontal brace pole in the pasture fence at one side of the lawn. Occasionally he would give the normal song, especially late in the summer, when he would often start out with the ordinary song, and, after a few repetitions, would change to the "whickup" phase.

During these visits to the lawn, both during the life of "Old Whickup" and since, we are often treated to the low, purring note, which may be described by the syllables "kow-wow-wow-wow-wow," given in a low monotone. This call seems to be given mostly when two birds are together, and may be either a love note, or a challenge.—John B. Lewis, *Lawrenceville, Va.*

An Explanation Regarding the Season of Activity of Snakes in Arkansas.—There having been some inquiries concerning and some friendly criticism of my reference to snakes in my paper "Winter Birds in Eastern Arkansas," which appeared in the December, 1924, issue of the Wilson Bulletin, due to the fact that snakes are supposed to be in evidence only in warm weather (summer) and that I was not there later than "a short time in March," it may be well to offer a few words of explanation for those who may have the same ideas as my inquirers but from whom I will not hear directly.

I did not mean to convey the impression that snakes were plentiful and active everywhere, especially in the woods or on the prairie lands, but they were abundantly present in the sloughs and bayous, and the first spring-like days brought them out to lie in an almost semi-dormant condition on logs partially submerged in these waterways. From two or three to a dozen or more, perhaps sometimes a score, of various "water snakes" might be seen, apparently inextricably interwoven, sunning themselves on such a log on any bright and moderately warm day. A rather popular amusement of the "Swamp Angels" of that day and time, the cruelty (to a snake?) of which was never thought of, was to shoot into the midst of a lot of these reptiles with a rifle or pistol. The snake struck by the bul let would at once retaliate by biting the one most convenient to his fangs, the bitten snake in turn would immediately strike the next and this would continue until the whole fighting, writhing mass rolled into the water to be lost from sight.

In my father's library were very good editions of the Iliad, Odyssey and other Greek and Roman classics, some of them with illustrations by Flaxman, and there was one full-page drawing of the head of Medusa which had a strange fascination for me when I was a small boy, and I would look and wonder at it for a quarter of an hour or more at a time. But after I had seen several of these hideous, struggling groups of maddened, striking serpents I had a far more vivid realization than the genius of the artist could give me of what a Medusa head might be.

While on this subject it may be apropos to record that a copperhead, full of life, fight and activity, was killed on a farm in Franklin County, Kentucky, the latter part of January of this present year. And the thermometer was registering zero or a few degrees below.—L. Otley Pindar, *Versailles, Ky.*

BIRD BANDING NOTES

Conducted by Wm. I. Lyon

BIRD BANDING NOTES FROM THE RECENT NATIONAL MEETINGS

The A. O. U. meeting at Pittsburgh. The forty-second annual meeting of the American Ornithologists' Union was held at Pittsburgh, Pa., from November 11-13, 1924, inclusive. The session on Wednesday forenoon was devoted to bird banding. Dr. Joseph Grinnell, of California, presented a paper on "Bird Netting as a Method in Ornithology", illustrated. "Some Results of Bird Banding", illustrated, was the subject of a paper by Wm. I. Lyon, of Illinois. Frederick C. Lincoln, of Washington, D. C., gave a report on "Results of Bird Banding in Europe", illustrated. A paper entitled "A Report of the Tanager Hill Bird Banding Station", prepared by Mrs. Frank W. Commons, of Minnesota, was presented by Dr. Thomas S. Roberts. Laurence B. Fletcher, of Massachusetts, reported on the "Activities of the Northeastern Bird Banding Association", illustrated.

During the week the Eastern Bird Banding Association held a banquet at the Faculty Club, and in spite of a severe rain storm which caused some members to become lost, the occasion proved to be a pleasant one. Rudyerd W. Boulton served as toastmaster. The speakers were, President A. A. Allen, Dr. T. S. Palmer, Frederick C. Lincoln, Hoyes Lloyd, and W. E. Saunders. The meeting closed with the exhibition of a series of lantern slides by Dr. Ralph E. DeLury, of Canada. An impromptu meeting was afterward held in the Zoology Building, where Dr. Fish exhibited two reels of Panama pictures.

The W. O. C. meeting at Nashville. The Inland Bird Banding Association held its annual meeting in conjunction with the Wilson Ornithological Club, at Nashville, Tennessee, on November 28-30, 1924. This was the first general meeting of an ornithological nature to be held south of the Ohio River, and its wonderful success is a great tribute to President A. F. Ganier and the Tennessee Ornithological Society. The memory of this meeting will remain forever with those who were able to attend. More than a dozen states were represented in the registry of attendance. A number of new recruits were added to the host of bird banders during the sessions. There seemed to be a general feeling that one of the results of this meeting would be a stimulation of interest in bird study in the southern states.

No one session was set aside especially for the papers on bird banding, but they were well distributed through all of the sessions. Mr. Frederick C. Lincoln, of Washington, discussed "The Purpose of Bird Banding and Some Results", illustrated. Mr. Herbert L. Stoddard, of Georgia, explained some very unique methods in a paper on "Banding the Shore Birds of Lake Michigan", illustrated. "Bird Banding Experiences in Indiana", was the subject chosen by Samuel L. Perkins III, of Indiana. Prof. James E. Stack, of the Michigan Agricultural College, discussed the matter of "Bird Banding in Colleges." "Various Methods Used in Bird Banding", illustrated, was discussed by William I. Lyon, of Illinois. The Secretary read a paper by Mrs. Frank W. Commons, of Minnesota, on "An Intimate Method of Studying Birds." Mr. A. F. Ganier, of Tennessee, reported on "Bird Banding in the Nashville District", illustrated. Two reels of motion pictures of birds of unusual merit were presented, as follows: "Sea Birds on

Wm. I. Lyon releasing at Nashville a Harris Sparrow trapped and banded in Illinois.

Bonaventure Island, Quebec", by Herbert L. Stoddard, of Georgia. "Bird Studies in Motion Pictures", by Dr. Thomas S. Roberts, of Minnesota, presented by Mr. Lyon. One or two other papers on banding were not presented because of lack of time, and it is hoped that these may be printed in the future.

The Inland Bird Banding Association held its annual business meeting on the morning of November 29, Saturday. Everyone present sincerely regretted the absence of the President, Mr. S. Prentiss Baldwin, of Ohio, whose attendance was prevented by sickness. Councillor Samuel E. Perkins III, was made chairman *pro tempore*. Then the minutes were read and adopted, the reports of the Secretary and of the Treasurer were read and adopted. Upon report of the nominating committee, F. C. Lincoln, chairman, the following officers were duly elected for the ensuing year.

President—William I. Lyon, Waukegan, Illinois.

Vice-President—Dr. Leon J. Cole, Washington, D. C.

Vice-President—Percival Brooks Coffin, Chicago, Illinois.

Secretary—Samuel E. Perkins III, Indianapolis, Indiana.

Treasurer—Herbert L. Stoddard, Beachton, Georgia.

Field Secretary—T. E. Musselman, Quincy, Illinois.

Councilors—S. Prentiss Baldwin, Cleveland, Ohio; M. J. Magee, Sault Ste. Marie, Michigan; Mrs. H. C. Miller, Racine,Wisconsin; O. M. Schantz, Chicago, Illinois; Prof. J. W. Stack, East Lansing, Michigan; Albert F. Ganier, Nashville, Tennessee; Frank W. Commons, Minneapolis, Minnesota; Dr. H. B. Ward, Urbana, Illinois; Prof. T. C. Stephens, Sioux City, Iowa; R. A. Gilliam, Dallas, Texas.

When the Saturday evening session was over, about nine o'clock, the guests were all quickly transported to the beautiful mansion of Mrs. James C. Bradford, where a delightful reception was given to the visitors. Early on the following morning a fleet of automobiles were waiting to take those who wished to go on the official field trip. Over twenty cars were counted in line at one time, and there must have been more than seventy-five people in the party. Stops were made in the various city parks and along the Tennessee River. It was quite an experience for those who came from the prairie states to get a glimpse of the great standing beech timber in Shelby Park. At noon the entire party assembled at the country home of Mr. and Mrs. Edward A. Lindsey, some twenty miles from Nashville, and known as "Ridgetop". Here a real southern "breakfast" was served with genuine southern hospitality. An afternoon stroll through the woods

on this mountain top brought us to the hour when we must hurry for the various trains upon which we were to scatter to our respective homes. And thus was brought to a close one of the most enjoyoble conventions of bird lovers within our experience.

[The following story by Mrs. Commons is a wonderful tribute to bird banding. Her work has converted a carefully guarded bird sanctuary into one of the most important bird banding stations in the country.—W. I. L.]

REPORT OF THE TANAGER HILL BIRD-BANDING STATION 1923-1924

By Marie A. Commons

It was somewhat under protest that we became banders of birds. Our interest in ornithology had a sentimental rather than a scientific basis and birds had ever been to us symbols of freedom; consequently it was with reluctance that we undertook an enterprise that might seem to add one more hazard to their precarious lives or burden them with fetters that might impede their liberty.

But it was at the A. O. U. Convention in Chicago in 1922, after listening in rapt attention to Mr. Lincoln, Mr. Baldwin and Mr. Lyon that we experienced a change of heart, and returned home more keenly alive to the wonderful possibilities of our own few acres of land.

This property, which we call Tanager Hill, is situated seventeen miles from Minneapolis, on Lake Minnetonka in the State of Minnesota. There are thirty-three acres, to be exact, with 700 feet of level shoreline where gulls and terns circle in graceful flight, kingfishers dive from the dock stakes, shore birds pick their way daintily along the sand and blueherons stand motionless as if painted on a screen. From the highway, which skirts the shore, the land dips to a willow-encircled marsh, vocal from spring to fall with redwing blackbirds, and the favorite haunt of bitterns, rails, greenherons and the many marsh-loving sparrows, vireos and warblers. Beyond the marsh is the hay meadow with its song sparrows, bobolinks and meadowlarks, and from there the land rises gradually to the vegetable garden and berry patches, always disputed territory with catbirds, robins, orioles, grosbeaks and pheasants. An abrupt incline brings us to the alfalfa field where the killdeers and vesper sparrows nest, and still climbing we reach the broad lawn and the house on the crest of the hill amid the sugar maples, elms and lindens. The roadway, leading to the rear of the house, leaves the highway at the lake shore and winds up the hill, past orchard and vineyard, bordered with berry-bearing shrubs, dear to the birds at all seasons, but especially to migrants in the fall. Back of the house wild nature prevails—a dozen steps from the door and we are in a native forest with its tangle of second growth and under-brush, mostly wild berry bushes, elder, prickly ash and dogwood. On the right the land drops off precipitously into a fern carpeted ravine, beloved of the thrushes and ovenbirds, and on the left declines in wooded slopes and hollows to the tree pasture, on the eastern boundary of which lies Round Lake. This fair-sized body of water, much in favor with migrating water foul, is fed by a stream that meanders into it through a marsh of quill reeds and wild rice, the home of yellow-headed blackbirds, marsh wrens and various shore birds.

There are not many small areas of land, perhaps, that comprise such an unusual variety of nesting sites and feeding places, and it is not surprising that after the Chicago meeting, we should feel stirring within us a sense of obligation

—a duty, in fact, for in our part of the country there was no banding station of sufficient activity to further the efficient work being done south and east of us.

We returned to Tanager Hill the following Spring, 1923, too late to really profit by the migration for, by the time we had secured our licenses, it was the last of April.

We began our enterprise on April 28, with only two traps; a government sparrow trap and a small drop trap 2 feet 6 by 3 feet, made according to plan described in Mr. Lincoln's Circular No. 18, and on that day banded two birds. The first was a white-breasted nuthatch, taken in the drop trap. Being the first, we have since felt a special interest in his movements. Having acquired his band No. 57316, he immediately disappeared and we did not see him again until October 13, repeating on the 14, 15, 16, 17, 20, 28, 29, and November 1, 3, 8, 17, and finally on the 22nd, when the traps were closed for the season. We naturally expected him to be the first bird to welcome us this spring, but it was May 4 before he returned, merely for the day it seems, as he did not appear again until September 16. After that he repeated September 30, October 9, 17, 21, 22, 29, and November 2.

We very soon discovered that two traps were inadequate to our needs and on June 19 built a house trap, after Mr. Lincoln's plan (Fig. 6) in Circular 18, and a large drop trap, 4 feet by 5 feet. As our work increased and our enthusiasm with it, we added to our equipment, from time to time, until, during the fall migration, we had in use two drop traps, one house trap and eleven government sparrow traps. These traps we have continued to use during 1924, with the addition of two more sparrow traps, two warbler traps and one woodpecker trap purchased from Mr. Lyon, of Waukegan.

For bait we use wild seeds screened from wheat, to which is added a rich mixture of hemp, millet, canary, and sunflower seed, with sometimes bread crumbs and suet; and during the season, we make the traps attractive with strawberries, cherries, plums, apples cut in small pieces and under the drop traps hang bunches of grapes and sprays of bright berries. We also provide drinking places near the traps.

During the year 1923 we banded 978 birds; of that number 507 were migrants.

Of the fall migrants the juncos and white-throats were by far the most abundant. Two hundred and ninety-eight juncos were banded between September 21 and November 18. Ninety-four repeated, one of them sixteen times. One hundred and thirty-two white-throats were banded between September 20 and October 23. Fifty-two repeated, one of them seventeen times. The remaining migrants were Lincoln, Tree, Harris, and Fox Sparrows.

Twenty-seven species were represented among the 471 residents banded, including 119 fledglings from thirty-two nests. We removed from the traps 631 repeats, giving us a total of 1609 birds handled in 1923.

We were fortunate in having but few casualties. One junco was killed in the trap by a Red Squirrel, and one by a Northern Shrike, that entered the trap undoubtedly for that purpose, and he now wears band No. 239527 as a proof of his guilt.

Among the many curious and interesting happenings of the year I might mention that of a Song Sparrow which was banded so late in the evening that he was brought into the house for identification. It was totally dark when he was released, and seemingly dazed by the sudden transition from light to darkness, he dropped to the ground as if injured. We threw a flash light on the ground and he hopped into the circle of light. Slowly we walked backward the sparrow following, keeping within the lighted area to the end of the terrace and back, a distance of nearly two hundred feet; now and then he stopped to peck at the grass as if looking for something to eat and finally hopped off into the shrubbery.

Throughout our season's work we were anticipating the coming year with its added interest of returning birds. Would our own nesting birds come back, would the migrants take the same route going north in the spring? As to migrants we were doomed to disappointment, not one returned, but of the 471 residents banded forty-one came back; of these sixteen were catbirds, 13.5 per cent of 119 banded; fourteen were song sparrows, 10.75 per cent of 131 banded; four redwings, 22 per cent of eighteen banded. The remaining seven were two Chipping Sparrows, two Robins, two nuthatches and one chickadee. All of these returns were adults when banded. We did so hope that some of our banded fledgings would return, if only to reassure us that the bands, placed with so much solicitude on their fragile little legs, had not checked their development.

Our return to Tanager Hill in 1924 was well in advance of the migration, but a heavy storm lasting for two days covered the ground with eighteen inches of snow, whirling it into drifts from four to seven feet deep. Although the few Robins, Bluebirds and Phoebes that had ventured north were too hungry to be shy, and came boldly to the house to be fed, we did not set our traps until April 2. During both April and May there were many cold, wet days and the traps needed constant attention, for the birds entered them without hesitation and repeated constantly, evidently appreciating an abundant supply of food near at hand. They were, for the most part, sorry looking creatures, wet and bedraggled and difficult to handle.

The spring migration totaled 320 birds, representing fifteen species, a little over double the number of species that appeared in the fall, and the junco still held first place. We banded 166, with the white-throat a poor second—only sixty-five.

By May 30 the juncos and white-throats were gone, the migration well over and our interest was centered in nesting birds and fledglings.

Of 986 resident birds banded, representing fifty-four species, 261 were fledglings from ninety nests. The repeats up to the beginning of the fall migration, numbered 1404, thirteen being young birds banded in the nest, lively youngsters none the worse for their aluminum adornment.

It is interesting to note the increase and decrease from month to month. In April we banded 275, in May 305, the two months when the residents were arriving and the migrants passing through. In June the number dropped to 171. These were birds that had settled down to their domestic duties, really too busy to investigate traps, wandering into them by chance, or in bad weather for a quick lunch. In July, when the young had left the nest and were roaming about with their parents clamoring for food, we nearly doubled the previous month's record, banding 342. In August it fell again and we banded only 189. By this

time our own birds were all banded and were scattering; the majority of these coming into the traps were birds probably wandering in from other localities. In September the lowest mark was reached with only sixty-one; many immature birds and old birds in various stages of moult. The first migrants did not appear until the fifteenth of the month, one or two now and then, but no flocks until October 1st.

Record for 1924 from April 2nd to November 14th.

Total number of birds banded—1825.

Total number of species represented—59.

Total number of repeats—2018.

Total number of birds handled—3843.

Record for the two years from April 28th, 1923 to November 1st 1924 (excluding winter period, when traps were closed.)

Total number of birds banded—2803.

Total number of species represented—65.

Total number of repeats—2649.

Total number of birds handled—5452.

We may never know of what value our work has been to science, but we are joyfully aware of its value to ourselves. We did not realize how little we knew about bird life until we held these elusive creatures in our hands. Not only have we immeasureably increased our knowledge of their physical characters, but we are becoming acquainted with the distinctive peculiarity of each species, for we have learned that they differ in disposition as do people of different nationalities; it is even true that different birds of the same species have their individual temperament. We came to know the characteristic flit of a certain Chipping Sparrow that repeated seventy-nine times last summer and very often called his number before looking at the band. We have grown to feel great respect for the mental processes of the nuthatch, to fear the saucy spitefullness of the chickadee, to love the gentle confiding nature of the Chipping Sparrow and laugh at the big cry babies—the Robins.

One could go on indefinitely recalling amusing and interesting exhibitions of bird behavior and it is this phase of the work that increases in fascination from day to day and keeps the bird bander eager from one season to the next.

Professor Wm. Rowan, of the University of Alberta, writes in the January *Auk* of a possible danger to birds which are trapped for banding purposes. Birds which he trapped for experimental purposes were kept for some time after capture. These birds suffered a mortality of about 20 per cent. Post-mortem examinations indicated that death was due to subcutaneous inflammation in the region of the lores. The conclusion is that the birds injured themselves on the sharp cut-wire ends projecting into the traps, while they instinctively endeavored to escape. The writer further argues that 19.1 per cent of the "returns" listed in Bulletin No. 1269 of the U. S. Department of Agriculture may have been due to the death of the birds from a similar cause, viz., imperfection in trap construction. All bird banders should therefore carefully inspect their traps and make certain that no cut-wire ends project in any way that might permit injury to the birds.

The Nashville Meeting of the W. O. C. and I. B. B. A.

PROCEEDINGS OF WILSON ORNITHOLOGICAL CLUB

Eleventh Annual Meeting

THE ELEVENTH ANNUAL MEETING OF THE WILSON ORNITHOLOGICAL CLUB was held at Nashville, Tennessee, November 28-30, 1924, in conjunction with The Inland Bird Banding Association, The Tennessee Academy of Science, The Kentucky Ornithological Society, and The Tennessee Ornithological Society. At the business session, held November 28, the Treasurer's report was read and adopted, after being audited by a committee composed of T. C. Stephens, Wm. I. Lyon, and H. L. Stoddard. (See report below). The following report was given by the Secretary: (See report below). The Vice-President in his report urged a larger Bulletin and a drive for additional members. He further suggested that libraries in the district covered by the W. O. C. be urged to subscribe for the WILSON BULLETIN. The nominating committee composed of Charles J. Spiker, Frederick C. Lincoln, and James W. Stack, recommended the following as the officers for 1925, all of whom were duly elected:

President—Albert F. Ganier, Nashville, Tennessee.

Vice-President—Thomas H. Whitney, Atlantic, Iowa.

Secretary—Gordon Wilson, Bowling Green, Kentucky.

Treasurer—Ben. J. Blincoe, Dayton, Ohio.

Additional members of the Council—W. M. Rosen, Ogden, Iowa; H. L. Stoddard, Beachton, Georgia; Wm. I. Lyon, Waukegan, Illinois; Lynds Jones, Oberlin, Ohio.

The committee on resolutions reported as follows:

It is the wish of The Wilson Ornithological Club and The Inland Bird Banding Association to express their hearty appreciation for the hospitality and untiring efforts of The Tennessee Ornithological Society, the George Peabody College for Teachers, and Mrs. Parmer, matron of the Social-Religious Building, to make the Nashville meting a great success.

T. C. Stephens Marjorie Ruth Ross Samuel E. Perkins III, *Committee.*

Various suggestions were made as to the future policy of the club. It was suggested that the Nebraska Ornithologists' Union, which had asked to be relieved from its former affiliation with the W. O. C., be requested to remain associated on the same basis as the state organizations of Tennessee, Kentucky, and Iowa. Lynds Jones made a motion that the newly elected officers be empowered to look into the matter of association and affiliation and report at the next annual meeting. T. C. Stephens invited the W. O. C. and I. B. B. A. to hold their 1926 or some other meeting in Sioux City, Iowa.

Key to Group Picture: 1. F. C. Lincoln, Washington, D. C. 2. Gordon Wilson, Bowling Green, Ky. 3. S. E. Perkins, Indianapolis, Ind. 4. H. E. Stoddard, Beachton, Ga. 5. A. F. Ganier, Nashville, Tenn. 6. Lynds Jones, Oberlin, Ohio. 7. J. W. Stack, E. Lansing, Mich. 8. T. C Stephens, Sioux City, Iowa. 9. W. I. Lyon, Waukegon, Ill. 10. Geo. R. Mayfield, Nashville, Tenn. 11. Mrs. H. P. Ijams, Knoxville, Tenn. 12. Mrs. R. H. Gardner, Columbus, Ind. 13. Mrs. Chas. McBride, Louisville, Ky. 14. Mrs. N. Brown, Louisville, Ky. 15. W. G. Cramer, Cincinnati, Ohio. 16. J. A. Robins, McKenzie, Tenn. 17. R. A. Gilliam, Dallas, Texas. 18. P. L. Cobb, Nashville, Tenn. 19. Mrs. A. F. Ganier, Nashville, Tenn. 20. Miss Marjory Ross, Fairmont, W. Va. 21. Floyd Bralliar, Nashville, Tenn. 22. Miss Emilie Yunker, Louisville, Ky. 23. Mrs. K. P. Wright, Nashville, Tenn. 24. Mrs. Nancy L. Morgan, Columbia, Tenn. 25. Paul Adams, Knoxville, Tenn. 26. Vernon Sharp, Nashville, Tenn. 27. W. W. Worthington, Annville, Ky. 28. Nevin Nicholson, Ft. Lauderdals, Fla. 29. R. H. Gardner, Columbus, Ind. 30. Mrs. G. R. Mayfield, Nashville, Tenn. 31. H. P. Ijams, Knoxville, Tenn. 32. Miss Amelia Layer, Louisville, Ky. 33. C. J. Spiker, New Hampton, Iowa. 34. Mrs. J. M. Ransom, Tullahoma, Tenn. 35. Miss Fergus Campbell, Nashville, Tenn. 36. Mrs. Sandford Duncan. Nashville, Tenn. 37. Miss Alma Hollinger, Nashville, Tenn. 38. Mrs. H. L. Stoddard, Beachton, Go.

THE NASHVILLE PROGRAM

Friday Morning Session

1. Address of Welcome. Professor A. C. Webb, Nashville, Tennessee.

2. Inheritance of Song in Birds. Professor Herbert C. Sanborn, Vanderbilt University, Nashville, Tennessee.

R. A. Gilliam and F. C. Lincoln at Nashville.

A review of the conclusions reached by Barrington, Scott, and Conradi, with a summary of Professor Sanborn's experiments with birds raised from the egg (or from a few hours of age) without association with any of their own species: Baltimore Orioles, Robins, Bluebirds, Cardinals, Screech Owls, and Crows.

3. Recollections of Audubon by His Brother-in-Law, William J. Bakewell. Sent in by Mrs. Alicia B. Shaffer (Audubon's niece), Cincinnati, Ohio, and read by the Secretary.

A fragment of a paper found in Mr. Bakewell's collection of manuscripts dealing with the author's experiences with Audubon in early days of Kentucky.

4. The Purpose of Bird Banding and Some Results. (Illustrated with slides). Frederick C. Lincoln, Biological Survey, Washington, D. C.

A review of the government's work thus far and a statement of the big purposes of the work: to determine migrations and life histories of birds. Mr. Lincoln showed many slides made by Mr. S. Prentiss Baldwin, Cleveland, Ohio.

5. Banding Shore Birds on Lake Michigan. H. L. Stoddard, Beachton, Georgia.

How a trap was evolved to catch shore birds, particularly Sandpipers.

6. State Ornithological Societies and Their Relation to the Wilson Ornithological Club. T. C. Stephens, Sioux City, Iowa.

A resume of the purposes and accomplishments of the Nebraska Ornithologists' Union, The Iowa Ornithologists' Union, The Kentucky Ornithological Society, and The Tennessee Ornithological Society.

7. Falconry, an Old-New Sport. D. R. Gray, Rockdale, Tennessee.

An account of Mr. Gray's interest and accomplishments in falconry, together with an exhibition of books he has collected which deal with this old sport. (Given by A. F. Ganier).

8. Birds on a Kentucky Farm. G. D. Hibbs, Cox's Creek, Kentucky.

An account of nesting devices used on Mr. Cox's farm, with observations on bird enemies. (Resume of paper given by the Secretary).

9. Birds of a Florida Farm. Laura Gano. Thonotosassa, Florida.

Observations of 109 species studied on a citrus farm. (Extracts read by the Secretary).

10. For Our Own Good and That of the Birds. Harriet Audubon, Louisville, Kentucky.

A plea for bird protection written by the aged grand-daughter of the naturalist. (Read by title and commented on by the Secretary).

Friday Afternoon Session

(The first four addresses and papers were given at a joint session of the Wilson Ornithological Club, the Inland Bird Banding Association, and The Tennessee Academy of Science).

1. Reelfoot, an Earthquake Lake. Wilbur A. Nelson, State Geologist, Nashville, Tennessee.

An account of the origin and present condition of Reelfoot Lake, illustrated with slides, taken chiefly by the United States Air Service.

2. Some Interesting Birds of the Great Smoky Mountains. A. F. Ganier, Nashville, Tennessee.

The record of several vacation trips taken to the Great Smokies by Mr. Ganier. A study of the Canadian species which summer there.

3. The Great Smokies from the Naturalist's Standpoint. Professor George R. Mayfield, Vanderbilt University, Nashville, Tennessee.

A review of books written on the Great Smokies, with personal impressions of this great wonderland of the eastern highlands.

4. The Great Smoky Mountains from the Business Man's Standpoint. Colonel D. C. Chapman, Knoxville, Tennessee.

A summary of the advantages to be derived from making a section of the Great Smoky Mountains a state or national park.

5. West Virginia Birds, a reel of motion pictures, made under the direction of State Ornithologist I. H. Johnston, Charleston, West Virginia.

6. National Bird Refuges, several reels of motion pictures explained by Frederick C. Lincoln, Biological Survey, Washington, D. C.

7. Tanager Hill Bird Banding Station. Mrs. Frank W. Commons, Minneapolis, Minnesota.

Records of the very successful seasons of 1923 and 1924 in banding at the summer home of Mrs. Commons.

Friday Evening Session

On Friday evening, November 28, the societies meeting jointly participated in the annual dinner, at Hotel Hermitage. The menu cards, cleverly worded in bird language, were the work of Mrs. George R. Mayfield. Plates were laid for fifty-one. The following people responded to toasts: Mrs. James C. Bradford, Richard Watkins, Lynds Jones, Gordon Wilson, Wm. I. Lyon, Frederick C. Lincoln, T. C. Stephens, H. L. Stoddard, R. A. Gilliam, and S. W. Perkins. President A. F. Ganier acted as toastmaster.

SATURDAY MORNING SESSION

1. A Three-Day Canoe Trip on Barren River, Kentucky. Gordon Wilson, Bowling Green, Kentucky.

A record of unusual birds seen and an account of the topography of the country traversed.

2. Ornithology in American Colleges. Professor James W. Stack, East Lansing, Michigan.

A survey of ornithology as it is taught in the public and private colleges and universities. A few words of approval for banding as a scientific way of studying birds.

3. The Various Methods Used in Bird Banding. Wm. I. Lyon, Waukegan, Illinois.

The origin and devolopment of all kinds of traps and methods. (Profusely illustrated with slides).

4. A Nesting Census About a Suburban Home. Harry P. Ijams, Knoxville, Tennessee.

A summary of the nests found on Mr. Ijam's place, illustrated with a map.

5. A Few Studies in Nest Composition. Charles J. Spiker, New Hampton, Iowa.

A record of the study and weighing of the materials in the nests of twenty-five Robins, nine Brown Thrashers, six Red-winged Blackbirds, six Mourning Doves, three Yellow Warblers, and two Kingbirds.

6. Bird Banding in the Nashville District. A. F. Ganier.

A summary of the methods used in his district.

7. The School Children and the Birds. Miss Emilie Yunker, Louisville, Kentucky.

An account of the work with the children of the public schools: bird-gardening, Christmas trees for the birds, supervised hikes in Cherokee and other parks.

8. Methods of Attracting Birds about the Homes. Mrs. Sanford Duncan, Nashville, Tennessee.

How Mrs. Duncan has destroyed bird enemies and has attracted birds by means of food, shelter, and other devices.

SATURDAY AFTERNOON SESSION

1. A Pugnacious Mockingbird. Lattimer Wilson, Nashville, Tennessee.

A motion-picture reel showing a fight between a Mockingbird and a cat.

2. Bird Colonies on Bonaventure Island. H. L. Stoddard, Beachton, Georgia.

Three reels and numerous slides showing Gannets, Puffins, and other sea birds nesting on this Canadian island.

3. Olympic Island Sea-Bird Reservations. Lynds Jones, Oberlin, Ohio.

A series of slides made by Dr. Jones on his several trips to the islands off the coast of northern Washington.

4. Bird Banding Experiences in Indiana. Samuel E. Perkins, III, Indianapolis, Indiana.

Interesting records which show that the number of birds has been increased by banding.

5. The Yellow Rail and Other Birds of the Great Plains. Reverend P. B. Peabody, Blue Rapids, Kansas.

The paper and numerous slides were presented by A. F. Ganier.

6. Bird Studies in Motion Pictures. A reel loaned by Dr. Thomas S. Roberts, Minneapolis, Minnesota.

7. Owls and Their Habits. Thomas M. Earl, Columbus, Ohio. (Read by title).

8. Memories of Pelican Island. W. M. Rosen, Ogden, Iowa. (Read by title).

9. Bird Banding at the Iowa Lakeside Laboratory. Professor Dayton Stoner, Iowa City, Iowa. (Read by title).

10. Wild Geese: How a Flock of Them Were Tamed. E. D. Nauman, Sigourney, Iowa. (Read by title).

11. Bird Study in the Florida Public Schools. R. J. Longstreet, Daytona Beach, Florida. (Read by title).

SATURDAY EVENING SESSION

1. Nesting Haunts of the Egret in Florida. A motion picture study furnished by The United States Biological Survey.

2. Bird Banding: Methods, Purposes, and Some Interesting Results. Mr. F. C. Lincoln, U. S. Biological Survey, and Mr. William I. Lyon, President, Inland Bird Banding Association, Waukegan, Illinois.

3. Reception at "Woodstock", the country home of Mrs. James C. Bradford, for visiting members and local members of The Tennessee Ornithological Society.

SUNDAY, November 30, 1924

An all-day field trip was taken, through Centennial Park, Shelby Park on Cumberland River, Ridgetop. Lunch was served at the country home of Mr. Edward A. Lindsey.

REPORT OF THE SECRETARY FOR 1924

Number of members taken in during 1924 91

Distribution of New Members

Sustaining	1
Active	7
Associate	83

Field Trip at Nashville, at "Ridgetop."

Distribution by states—Alabama, 1; Arkansas, 1; California, 5; Canada, 5; Colorado, 1; District of Columbia, 1; Florida, 3; Georgia, 2; Illinois, 4; Indiana, 1; Iowa, 2; Kansas, 1; Kentucky, 8; Maryland, 2; Massachusetts, 2; Michigan, 8; Missouri, 3; Montana, 1; New Hampshire, 1; New Jersey, 2; New York, 6; North Dakota, 3; Ohio, 6; Oklahoma, 1; Pennsylvania, 5; Rhode Island, 1; South Dakota, 1; Tennessee, 8; Texas, 3; Virginia, 2; West Virginia, 1; Wisconsin, 1; Wyoming, 2.

Distribution by recommendation—Gordon Wilson, 64; A. F. Ganier, 6; Wm. I. Lyon, 4; Lynds Jones, 3; Ben J. Blincoe, 2; R. A. Gilliam, 2; H. L. Stoddard, 2; T. L. Hankinson, 2; Marjorie Ruth Ross, 1; Mrs. W. P. Morgan, 1; W. A. Strong, 1; C. F. DeGaris, 1; W. C. Bradbury, 1; L. Otley Pindar, 1.

During the year the Secretary and the Treasurer have made an effort to get the membership list perfect. Those long in arrears have been dropped, after being written personally by both officers. The membership list as it appeared in the September BULLETIN represents the result of that effort. Only two corrections have been offered to that list.

Gordon Wilson, *Secretary.*

REPORT OF THE TREASURER FOR 1924

Dayton, Ohio, January 2, 1925.

RECEIPTS FOR 1924

Cash received from former treasurer	$129.59	
Associate Members	396.70	
Active Members	370.50	
Sustaining Members	145.00	
Subscriptions and Exchanges	102.35	
Nebraska Ornithologist's Union	76.00	
Sale of Back Numbers of BULLETIN	30.05	
		$1,250.19
Deposited but not accounted for		.50
		$1,250.69

DISBURSEMENTS FOR 1924

January 17—To Secretary for printing and postage	$ 23.00	
February 16—News Printing Co.	606.40	
June 2—News Printing Co.	323.28	
October 19—News Printing Co.	175.00	
December 1—Secretary, annual letter, etc.	24.50	
Amount retained from dues by Secretary for various expenses	44.60	
Retained by Editor for postage	1.50	
Treasurer's expenses	16.74	
		$1,215.02
January 1, 1925—Cash on hand		35.67
		$1,250.69

Ben. J. Blincoe, *Treasurer.*

NOTES HERE AND THERE

Conducted by the Secretary

Mr. Edward Von S. Dingle, whose bird portraits were mentioned in this column, in a letter to the Secretary tells a number of interesting things about his location and his work: "I have been interested in birds for many years and have been drawing and painting them for about fifteen years. So far my work has been confined to birds of South Carolina. I live on the sea coast near Charleston, in a territory rich in bird life. From my windows I can see, feeding at low tide, all the Herons, including the American and Snowy Egrets, the latter breeding in sight of my house. I can see Willets, Oyster-catchers, Loons, Caspian, Royal, Common, Black, Forster and Least Terns; Black Skimmers and Brown Pelicans; Florida Cormorants, Wood Ibises, Hudsonian Curlews, Turnstones, and many other shore birds. There have been four Mississippi Kites over my house at one time and on several occasions Duck Hawks passed by. Bald Eagles, Fish Hawks, and Horned Owls breed within sight of my house. All the marsh sparrows winter here and come into my yard: Sharp-tailed, Nelson's, Acadian, Seaside, and Macgillivray's; in the broom grass fields less than a mile away Henslow's and LeConte's Sparrows winter." How the Secretary, with his meager opportunity to see shore birds, envies Mr. Dingle!

Oscar McKinley Bryens, McMillan, Michigan, reports that the Evening Grosbeak is as common with him this winter as the Blue Jay; that he has recorded the Arctic Three-toed Woodpecker a number of times; that he has found the Snowflake several times since September. One especially large flock of Snowflakes he estimated at nearly 2000. He at one time in 1924 saw a Hairy Woodpecker take 27 black ants at one meal, from some split wood where he found a colony of ants and placed the wood near his feeding shelf.

William A. Brock, a member of the Kentucky Ornithological Society, reports to the Secretary that the Bronzed Grackle has been abundant in Louisville right up to Christmas, a rather unusual thing for this territory. As late as December 25, 1924, he saw a flock of 100 or more.

The Reverend W. F. Henninger, an account of whose collecting was recently summarized in this column, is teaching in a mission college at Cachoeira, Rio Grande do Sul, Brazil. The Secretary has recently had a good letter from him, in which he says that this very column was started by Mr. Henninger himself when he was the Secretary of the W. O. C. His collecting has been held up often by revolutions, which cause him to lose the right to use his gun. Then he turns to his butterfly nest. He has identified, in spite of heavy teaching work and often delicate health, 190 species of birds and has taken specimens of 142 species. Several of his students are aiding him in his collecting, especially of insects. He believes that he has several new species in his collection of over 20,000 butterflies and beetles.

Mr. R. A. Wilson, who conducts a very interesting column in the *Nashville Banner* called *Fins, Furs, and Feathers*, gave a large part of his column of Sunday, December 7, 1924, to a review of our annual W. O. C. and I. B. B. A. meeting, November 28-30. Among other fine things he said, "It is too early to measure what these evangels of bird lore have done for us, but it is safe to say

that the slowly growing movement in the South to study and protect the birds has received the greatest impetus it ever had, and may spread widely and yield a rich harvest."

One of the interesting things at the annual meeting was a paper loaned to the club by Mrs. Alicia Bakewell Shaffer, of Cincinnati, Ohio. It was a fragment found in the papers of her father, William J. Bakewell, the brother-in-law of Audubon, and was a series of recollections of the famous naturalist, especially of his residence in Kentucky. Mr. Bakewell, then a boy, came with his sister and brother-in-law to Kentucky, where he lived for two years, helping the naturalist collect birds and animals. Mrs. Shaffer is at present planning to issue this paper and several others dealing with her illustrious uncle in book form. We regret very much that it cannot be published the columns of this magazine.

Mr. E. D. Nauman, Sigourney, Iowa, contributed a paper to the annual program telling how two farmers in Keokuk County, Iowa, succeeded in practically taming a flock of wild geese, the common Canada Goose. Food was scattered in the snow for the flock, which remained all winter and returned year after year.

Our annual letter to members, announcing the meeting at Nashville, found Henry B. Skeele, formerly of Savannah, Georgia, but now of Bethel, Maine, at San Remo, Italy, where he is now spending the winter.

Henson H. Thomas, Pomeroy, Ohio, one of our new members, had the good fortune to identify in his territory 93 species in his first year of study there. He says that nearly all of these are land birds, for there are no swamps or streams near.

The Massachusetts Audubon Society maintains at Sharon, Massachusetts, for the special benefit of their members a bird sanctuary, called Moose Hill Bird Sanctuary. It is protected by a resident warden.

Miss Laura Gano, Thonotosassa, Florida, sent a paper for the annual meeting which bore the title, *Birds of a Florida Farm*. The farm has 147 acres and is located near Tampa. Because of the varied nature of the farm, bird life is especially prominent. Miss Gano says that summer is the quietest time of the year, in marked contrast to her former home in the North. For the farm area alone she reports 109 species identified in five years. Many of the species are semi-tropic birds which are known to most of the W. O. C. members only through books or museums or zoological parks.

Mr. R. J. Longstreet, Daytona Beach, Florida, recently was called upon to draft a law making Bird Study a part of the course of study in his state. The law was passed and is now in effect.

Mr. W. A. Strong, San Jose, California, reports that the year 1924 was especially notable for him in his collecting of rare or semi-rare species. He found a nest of Sennett's Warbler which was double, four inches high, the bottom nest never having been used. He also banded a number of nestlings, nearly all of them of western species.

Our President, A. F. Ganier, sends in a very interesting note: On January 24 he found a set of two fresh eggs of the Great Horned Owl. The nest was located in the cavity of a big beech tree. On the next day he found another of the same species on a ledge on a cliff over Stone River. This last nest had been

visited a week before, that is, January 18, when it contained one egg. This is an exceedingly early record, Mr. Ganier says.

Professor L. Y. Lancaster, of the Kentucky Teachers College, Bowling Green, Kentucky, reports seeing Crows fighting Mallards on November 11, 1924, the first time he has ever seen Crows attacking any species of water birds.

Paul J. Adams, Knoxville, Tennessee, reports that he has seen Herring Gulls several times during the winter, his first winter record of this species. The Secretary saw two Herring Gulls on January 12, his only winter record for the species.

"The past three summers," says T. Gilbert Pearson, President of The National Association of Audubon Societies, in an article in *Nature Magazine*, "have been lamenting the failure of their storks to return. The platforms on poles in the yards remain tenantless—the old nests on the house roofs, through lack of repairs, are falling to pieces. What has become of the storks? 'Killed by eating grasshoppers poisoned by the Transvaal farmers', is the answer one will hear."

W. M. Walker, Jr., Hopkinsville, Kentucky, writes the Secretary that he was agreeably surprised at the large number of Red-headed Woodpeckers seen during Christmas week. The Secretary, who lives about fifty miles away, has recorded the same species for the second winter during his fifteen years at Bowling Green, Kentucky.

On December 13, 1924, our good friend Professor Dayton Stoner, of the University of Iowa, broadcasted from station WHAA an address on "Winter Birds." It has since been published as a number of the *University of Iowa Bulletin*.

O. M. Bryens, McMillan, Michigan, reports to the Secretary that he saw a Rusty Blackbird on November 17, 18, and 19, a very late date for this species. The two kinds of Crossbills have also been noted by him during the winter. The Blue Jay has also taken a freakish notion to stay this winter near his station.

An attractive little folder has come to the Secretary, announcing the opening of the Zoological Field Laboratory of The University of Kentucky in Braethitt County, Kentucky. The prime mover of this laboratory is our good friend Professor W. D. Funkhouser. Two of the courses to be offered in the next summer session are of especial interest to ornithologists: Animal Ecology and Field Biology, and Bird Study.

Professor J. M. Robinson, Alabama Polytechnic Institute, Auburn, Alabama, reports that some of his students, who are greatly interested in banding, have been successfully using a flash-light and a butterfly net at night, catching numbers of birds at the roosts.

"THE BETTER BULLETIN CLUB"

The response to President Ganier's appeal for funds with which to wipe out our deficit has been exceedingly gratifying to all of us. Some have raised their membership to a higher class; others have kept their old status and contributed an additional sum; still others have done both of these things. The officers are very grateful and much encouraged by this ready response. The following lists will make acknowledgment of receipts up to the time this copy is prepared.

The following members have taken Sustaining Membership: Allen H. Wood, Jr., C. K. Knickerbocker, Mrs. Charles R. Gleason, W. H. Osgood, Frank Breun, Fred. H. Kennard, A. W. Blain, T. Gilbert Pearson, Jesse L. Smith, A. D. Tinker, Harry C. Monk, P. B. Phillip, W. I. Mitchell, Junius Henderson, Herbert L. Stoddard, W. E. Saunders, Thomas S. Roberts, George Miksch Sutton, F. C. Willard, A. G. Prill, Gus Stucker, G. D. Hibbs, R. A. Gilliam, Myron H. Swenk, Thomas M. Earl, Leroy Titus Weeks, Waldo L. Rich, Charles H. Rogers, Louis B. Bishop, Harold H. Bailey, Gordon Wilson, R. M. Strong, Charles W. Richmond, Gayle B. Pickwell, J. C. Boyce, F. M. Phelps.

The following members have taken Active Membership: Grover Cook, R. H. Dean, E. A. Doolittle, Orange Cook, L. J. Cole, B. S. Bowdish, Charles A. Brunn, Henry W. Davis, Sallie Cavaness, Ethel Gowans, Frank W. Commons, Oscar M. Byrens,Albro D. Morrill, Mrs. Lena S. Millar, Edward S. Thomas, Marjorie Ruth Ross, J. A. Laughlin, Edward Von S. Dingle, R. D. Camp, Charles A. Stockbridge, Lewis E. Fifield, George E. Ekblaw, John B. Lewis, John A. Gillespie, Verdi Burtch, Albert M. Ingersoll, R. J. Longstreet, A. W. Honywill, Luke Francis Savage, Gardner P. Stickney, Marjorie Lee Guest, Charles J. Spiker, James L. Ortega, J. A. Neff, Anne Stuart, J. E. Guthrie, J. R. Pemberton, Arthur David Moore, Luther Little, W. M. Rosen, Arthur A. Allen, Josselyn Van Tyne, William A. Worthington, Karl Plath.

The following members have contributed to the Better Bulletin Club, either by raising their membership or by making a contribution: Samuel E. Perkins III, Allen H. Wood, Jr., William I. Lyon, Gordon Wilson, Carl D. Herdman, George L. Fordyce, Gabriel Cannon, D. R. Gray, Grover Cook, Karl W. Kahmann, C. K. Knickerbocker, H. G. Morse, Mrs. Charles R. Gleason, R. H. Dean, Paul Bartsch, A. H. Wright, T. S. Palmer, E. A. Doolittle, W. H. Osgood, Frank Bruen, Orange Cook, Fred H. Kennard, Dayton Stoner, S. Prentiss Baldwin, E. A. McIlhenny, Edward R. Ford, L. J. Cole, R. S. Bowdish, Ralph E. DeLury, A. W. Blain, T. Gilbert Pearson, Florence Merriam Bailey, Harry W. Dunkelberger, W. L. McAtee, Charles A. Bruun, Jesse L. Smith, Mrs. Beryl T. Mounts, Marion Pellew, A. D. Tinker, Harry C. Monk, P. B. Phillip, Henry W. Davis, Sallie Cavaness, W. I. Mitchell, Junius Henderson, Herbert L. Stoddard, W. E. Saunders, Thomas S. Roberts, S. S. Visher, Ethel Gowans, Frank W. Commons, George Miksch Sutton, Oscar M. Bryens, F. C. Willard, Albro D. Morrill, Mrs. Lena S. Miller, Thomas H. Whitney, A. G. Prill, Gus Stucker, Edward S. Thomas, G. D. Hibbs, R. A. Gilliam, Sherman Coryell, Myron H. Swenk, Marjorie Ruth Ross, Charles B. Floyd, J. A. Laughlin, Mrs. Tracy W. Guthrie, E. von S. Dingle, R. D. Camp, Thomas M. Earl, Charles A. Stockbridge, LeRoy Titus Weeks, C. W. Chamberlain, Lewis E. Fifield, Waldo L. Rich, Charles H. Rogers, George E. Ekblaw, John B. Lewis, John A. Gillespie, Verdi Burtch, Albert M. Ingersoll, R. J. Longstreet, A. W. Honywill, Jr., Louis B. Bishop, John P. Young, Luke Francis Savage, Gardner P. Stickney, Frank L. Burns, Harold H. Bailey, Marjorie Lee Guest, Charles J. Spiker, R. M. Strong, James L. Ortega, Dr. Guy C. Rich, Charles W. Richmond, J. A. Neff, Gayle B. Pickwell, Anne Stuart, J. G. Boyce, Margaret M. Nice, F. M. Phelps, J. E. Guthrie, J. R. Pemberton, Arthur David Moore, Clarence S. Jung, Luther Little, J. H. Fleming, William E. Praeger, W. M. Rosen, Arthur A. Allen, Josselyn Van Tyne ,Charles T. Ramsden, William A. Worthington, Stephen S. Gregory, Jr., Karl Plath.

PUBLICATIONS REVIEWED

FOOD HABITS OF SOME WINTER BIRD VISITANTS. By Ira N. Gabrielson. Department Bulletin No. 1294, United States Department of Agriculture, pp. 1-32. Washington, D. C., October 27, 1924.

This recent bulletin deals primarily with the winter food habits of ten species of our so-called "winter visitants", all *Fringillidae*, viz., the Evening Grosbeak, Pine Grosbeak, Red Crossbill, White-winged Crossbill, Hoary Redpoll,, Pine Siskin, Snow Bunting, Lapland Longspur and Smith Longspur. In order that the account of the food of the longspurs might be as complete as possible, Mr. Gabrielson also treats of the food of the Chestnut-collared and McCown Longspurs in this bulletin, although the data presented covers the winter months but slightly in the case of the Chestnut-collared Longspur and not at all in the case of the McCown Longspur. The bulletin is concluded with a discussion of the food of the common pipit and the Sprague Pipit, the former species being treated quite completely from the standpoint of the entire year.

Mr. Gabrielson terms the first seven of the ten species above mentioned the "woodland group", and points out that the evidence shows that a large part of their winter food consists of the seeds or buds of trees and shrubs, and indicates that these birds do neither any decided good nor harm, unless possibly they do some slight injury through their bud-eating propensities. The snow bunting and the longspurs he calls "prairie-feeding species", with grass and weeds forming the bulk of their diet. Mr. Gabrielson quite logically states that these seed-eaters may not, as is commonly thought, accomplish much real economic service in the matter of weed suppression on uncultivated ground, under the usual conditions obtaining in such places, because with all of their feeding on these seeds a great many more weeds are yet likely to sprout and grow than can possibly mature. What follows is that a comparatively few survivors smother their weaker competitors, and such ground produces each year about the same maximum of weeds that the physical conditions of the environment will permit, regardless of the work of the seed-eating birds.

In the light of this information, we should probably be somewhat more conservative in our statements as to the great value of the seed-eating birds to agriculture, and not give the impression that weed seed destruction by birds is necessarily an untold benefit to the farmer by telling how many weed seeds the birds may eat for breakfast on a single farm or how many tons of weed seeds a single species of sparrow will destroy in one state during the winter. While such statements may be intrinsically true, they are yet misleading, and are not necessary to secure an entirely favorable judgment on the value of our bird life. Mr. Gabrielson absolves the species discussed in this bulletin from responsibility for the spread of weeds through undigested seeds still capable of germination passing through the digestive tract, and concludes that while they do little or no good economically they are likewise not harmful, and should not be molested.

The bulletin is well illustrated by five full half-tone plates, four of them new illustrations from drawings by R. J. Sim, and the fifth a plate of the common pipit from a drawing by Fuertes. Unfortunately for the appearance of the bulletin, the first plate, showing the male Pine Grosbeak and Evening Grosbeak, had the explanatory legend reversing the correct arrangement of the figures, which

error had to be corrected by a red overstamp. The other plates represent the males of the two crossbills, the common redpoll and Pine Siskin and the Snow Bunting and Lapland Longspur. The figure of the latter bird is represented by a male in full breeding plumage—a dress in which it is not often seen over most of the United States—which makes it somewhat out of harmony with the figure of the Snow Bunting above it, which is in typical winter plumage, as well as unharmonious with the title and general purport of the bulletin.

In this bulletin Mr. Gabrielson has carefully collected the more important scattered published references to the food habits of the several species he deals with, and, supplementing this information with data obtained from an analysis of the contents of a usually adequate number of stomachs, has produced a very valuable report on an interesting group of birds.—M. H. S.

PROGRESS ON CO-OPERATIVE QUAIL INVESTIGATION: 1924. By Herbert L. Stoddard. Privately published by the Quail Study Fund for Southern Georgia and Northern Florida. Pp. 1-22. 1925.

This is a report of progress on the study of the life-history, food habits, and and general ecological relations of the Bobwhite. The chief purpose of the investigation is to determine the causes of the decrease in numbers of this game bird, in order that remedial measures may be applied. A fund of $30,000 has been underwritten by a group of interested men, so that the work may be carried on for a period of not less than three years. While the motive behind the enterprise is obviously a desire to increase the quail supply for shooting purposes, yet the plans for the work promise to yield most valuable information concerning the life-history of this species.

The investigation was inaugurated on March 17, 1924, and will, doubtless, be carried on during the three years planned, at least. Mr. H. L. Stoddard is in charge, and is assisted by Charles O. Handley. The area at the disposal of the investigators comprise something over 200,000 acres of typical quail country, lying on both sides of the boundary line between Georgia and Florida.

The methods so far employed are mapping of areas, field study of habits, examination of stomach contents, trapping and banding of the birds. Blind study has also given some results. A very novel device designated as a "clap-net" has been used in capturing coveys of the birds.

An article by Mr. Stoddard covering almost the same ground appears in the January Bulletin of the American Game Protective Association for January, entitled, "The Co-operative Bobwhite Quail Investigation."

One of the most important Bobwhite problems, both from biological and conservation viewpoints, is the question of inbreeding and outbreeding as it may affect vitality and virility. Is there a natural tendency toward inbreeding and does this result in degeneration? With banding as a means of individual identification it should be possible to determine to what extent inbreeding is practiced by this species, and whether it is harmful or beneficial. The answer to the question may have a most important bearing on the whole problem of quail conservation.—T. C. S.

TO OUR CONTRIBUTORS

Our members are urged to submit articles for publication in the Bulletin. Short items are desired for the department of General Notes, as well as longer contributions, especially pertaining to life-history, migration, ecology, behavior, song, economic ornithology, field equipment and methods, etc. Local faunal lists are also desired, but they should be annotated, at least briefly, and should be based upon sufficient study to be reasonably complete. Authors are asked to include the common name, the scientific name (from the A. O. U. check-list), and annotations, and they should be arranged in this order. The annotations should include explicit data concerning unusual species. Omit serial numbering.

THE MANUSCRIPT. The manuscript, or copy, should be prepared with due regard for literary style, correct spelling and punctuation. Use sheets of paper of good quality and of letter size (8½x11 inches); write on one side only, and leave wide margins; if at all possible manuscript should be prepared with a typewriter, using double spacing and a reasonably fresh, black ribbon.

The title should be carefully constructed so as to indicate most clearly the nature of the subject matter of the contribution. Where the paper deals with a single species it is desirable to include in the title both the common and the scientific names, or, to include the scientific name in the introductory paragraph. Contributors are requested to mark at the top of the first page of the manuscript the number of words contained. This will save the editor's time and will be appreciated.

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Annual Meetings of the Wilson Ornithological Club

	Retiring President
1914—Chicago. February 5. Chicago Academy of Sciences.	
1914—Chicago. December 29-30. New Morrison Hotel	T. C. Stephens
1915—Columbus. December 28-29. With the A. A. A. S.	T. C. Stephens
1916—Chicago. December 27-28. New Morrison Hotel	T. C. Stephens
1917—Pittsburgh. January 1-2, 1918. With the A. A. A. S.	W. F. Henninger
1918—No meeting on account of the exigencies of war	M. H. Swenk
1919—St. Louis. December 29-30. With the A. A. A. S.	M. H. Swenk
1920—Chicago. December 27-28. With the A. A. A. S.	R. M. Strong
1921—Chicago. December 26-27. The Field Museum	R. M. Strong
1922—Chicago. October 26	T. L. Hankinson
1923—Cincinnati. Dec. 31-Jan. 1, 1924. With the A. A. A. S.	T. L. Hankinson
1924—Nashville. November 28-29-30. Peabody College	A. F. Ganier